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Water Resources Data for New Jersey

Water Year 1977

Volume 1. Atlantic Slope Basins,
Hudson River to Cape May

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NJ-77-1

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for
New Jersey

Water Year 1977

Volume 1. Atlantic Slope Basins, Hudson River to Cape May

U.S. DEPARTMENT OF THE INTERIOR

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PREFACE

This report was prepared by the U.S. Geological Survey in cooperation with the State of New Jersey and with other agencies by personnel of the New Jersey district of the Water Resources Division under the supervision of H. Meisler, District Chief, and J. T. Callahan, Regional Hydrologist, Northeastern Region.

This report is one of a series issued State by State under the general direction of J. S. Cragwall, Jr., Chief Hydrologist, and G. W. Whetstone, Assistant Chief Hydrologist for Scientific Publications and Data Management.

Data for New Jersey are in two volumes as follows:

Volume 1. Atlantic Slope Basins, Hudson River to Cape May
Volume 2. Delaware River Basin and Tributaries to Delaware Bay

UNITED STATES DEPARTMENT OF THE INTERIOR

CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY

H. William Menard, Director

Prepared in cooperation with

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New Jersey Department of Agriculture
Delaware River Basin Commission
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U.S. Environmental Protection Agency
North Jersey District Water Supply Commission
Passaic Valley Water Commission
County of Bergen
County of Camden

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1977

CONTENTS

Page

Preface III
List of gaging stations, in downstream order, for which records are published VI
Introduction 1
Cooperation 1
Acknowledgements 1
Hydrologic conditions 2
Definition of terms 2
Downstream order and station number 8
Numbering system for wells and miscellaneous sites 9
Special networks and programs 9
Explanation of stage and water-discharge records 9
  Collection and computation of data 9
  Accuracy of field data and computed results 11
  Publications 12
  Other data available 12
  Records of stage or discharge collected by agencies other than the Geological Survey 12
Explanation of water-quality records 12
  Collection and examination of data 12
  Solutes 13
  Water temperatures 13
  Sediment 14
  Remark codes for water-quality data 14
  Publications 14
  Water-quality criteria 15
Explanation of ground-water level records 17
  Collection of the data 17
Selected references 17
Publications on techniques of water-resources investigations 19
Gaging station records 36
Discharge at partial-record stations and miscellaneous sites 452
  Low-flow partial-record stations 452
  Crest-stage partial-record stations 457
  Tidal crest-stage stations 464
  Miscellaneous sites 466
Ground-water records 468
  Ground-water level records 468
  Quality of ground-water records 474
Index 488

ILLUSTRATIONS

Figure 1. Well locations system 9
2. Daily streamflow at key gaging stations 20
3. Monthly streamflow at key gaging stations 21
4. Annual mean discharge at key gaging stations 22
5. Map showing location of gaging stations, Northern New Jersey 23
6. Map showing location of gaging stations, Central New Jersey 24
7. Map showing location of gaging station, Southern New Jersey 25
8. Map showing location of partial-record stations, Northern New Jersey 26
9. Map showing location of partial-record stations, Central New Jersey 27
10. Map showing location of partial-record station, Southern New Jersey 28
11. Map showing location of surface-water quality stations, Northern New Jersey 29
12. Map showing location of surface-water quality stations, Central New Jersey 30
13. Map showing location of surface-water quality stations, Southern New Jersey 31
14. Map showing location of ground-water observation well stations 32
15. Map showing location of ground-water observation well stations 33
16. Map showing location of ground-water quality stations 34
17. Map showing location of ground-water quality stations 35

TABLES

Table 1. Factors for conversion of chemical constituents in milligrams or micrograms per litre to milliequivalents per litre 5
2. Factors for conversion of sediment concentration in milligrams per litre to parts per million 5
3. Degrees Celsius (°C) to degrees Fahrenheit (°F) 13
4. Water-supply paper numbers and parts, water years 1945-70 14
Factors for converting English units to International System (SI) units .... inside back cover

GAGING STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

[Letter after station name designates type of data: (d) discharge, (c) chemical, (b) biological, (e) elevation, gage height or contents, (t) water temperature, (s) sediment]

Page

HUDSON RIVER BASIN

Rondout Creek:
Wallkill River at outflow of Mohawk Lake at Sparta (c) 36
Wallkill River at Franklin (c) 37
Wallkill River near Sussex (c) 38
Papakating Creek at Sussex (c) 39
Wallkill River near Unionville, NY (dc) 40
Pochuck Creek:
Black Creek near Vernon (c) 43

HACKENSACK RIVER BASIN

Hackensack River at West Nyack, NY (d) 44
Hackensack River at Rivervale (dc) 45
Pascack Brook at Westwood (d) 48
Hackensack River at New Milford (dc) 49
Reservoirs in Hackensack River basin (e) 51
Diversions in Hackensack River basin 52

PASSAIC RIVER BASIN

Passaic River near Millington (dc) 53
Passaic River near Chatham (dc) 56
Rockaway River above reservoir, at Boonton (dc) 59
Rockaway River below reservoir, at Boonton (d) 61
Rockaway River at Pine Brook (c) 62
Whippany River at Morristown (dc) 64
Whippany River near Pine Brook (c) 66
Passaic River at Two Bridges (c) 68
Pompton River:
Pequannock River (head of Pompton River) at Macopin intake dam (dc) 70
Wanaque River at Awosting (d) 72
Wanaque River at Monks (d) 73
Ringwood Creek near Wanaque (d) 74
West Brook near Wanaque (d) 75
Wanaque River at Wanaque (dtc) 76
Ramapo River:
Mahwah River near Suffern, NY (d) 79
Ramapo River near Mahwah (dc) 80
Ramapo River at Pompton Lakes (d) 82
Pompton River at Pompton Plains (d) 83
Pompton River at Two Bridges (c) 84
Passaic River at Rt. 46 at Singac (c) 86
Passaic River at Little Falls (dtc) 88
Passaic River at Rt. 46 at Elmwood Park (c) 90
Saddle River at Lodi (dc) 92
Third River at Passaic (d) 95
Reservoirs in Passaic River basin (e) 96
Diversions in Passaic River basin 99

ELIZABETH RIVER BASIN

Elizabeth River at Ursino Lake, at Elizabeth (d) 100

RAHWAY RIVER BASIN

Rahway River near Springfield (d) 101
Rahway River at Rahway (d) 102
Robinsions Branch Rahway River at Rahway (d) 103

RARITAN RIVER BASIN

South Branch Raritan River at Budd Lake outlet (c) 104
Drakes Brook at Bartley (c) 105
South Branch Raritan River at Middle Valley (c) 107
South Branch Raritan River near High Bridge (dtc) 109
South Branch Raritan River at outlet of Lake Solitude at High Bridge (c) 113
South Branch Raritan River Arch Street at High Bridge (c) 115
Spruce Run near High Bridge (c) 117
Mulhochaway Creek at Van Syckel (c) 119
Spruce Run at Clinton (dtc) 121
South Branch Raritan River at Stanton (dtc) 124
Round Valley Reservoir near North Tower near Lebanon (c) 129
Prescott Brook at Round Valley (c) 131
Bushkill Brook at Rockefellows Mills (c) 133
South Branch Raritan River at Three Bridges (c) 134
Neshanic River at Reaville (d) 136
South Branch Raritan River at South Branch (c) 137
Holland Brook at South Branch (c) 138
North Branch Raritan River near Chester (c) 140
North Branch Raritan River near Far Hills (c) 142
North Branch Raritan River at Bedminster (c) 143
Mine Brook at Far Hills (c) 144
North Branch Raritan River at Burnt Mills (cs) 146
Lamington (Black) River at Succasunna (d) 151
Lamington (Black) River near Ironia (dc) 152
Lamington (Black) River at Milltown (c) 154
Lamington (Black) River near Pottersville (dc) 155
Upper Cold Brook near Pottersville (d) 157
Lamington (Black) River at Lamington (c) 158
Lamington (Black) River near Whitehouse (cs) 159
Rockaway Creek near Potterstown (cs) 162
South Branch Rockaway Creek tributary at Lebanon (c) 167
South Branch Rockaway Creek at Whitehouse (dcbts) 169
Rockaway Creek at Mill Road at Whitehouse (cs) 176
Rockaway Creek at Whitehouse (dcts) 178

Page

RARITAN RIVER BASIN--Continued
- Rockaway Creek at Island Road at Whitehouse (cbs) 189
- Lamington (Black) River at Lamington Road near North Branch (cs) 192
- Lamington (Black) River at Burnt Mills (cs) 200
- Chambers Brook at North Branch Depot (c) 208
- North Branch Raritan River at North Branch (d) 209
- North Branch Raritan River near Raritan (d) 210
- North Branch Raritan River at South Branch (c) 211
- Raritan River at Raritan (c) 213
- Raritan River at Manville (dc) 214
  - Millstone River at Applegarth (c) 216
  - Millstone River at Grovers Mill (c) 218
    - Cranbury Brook at Plainsboro (c) 219
    - Bear Brook at Grovers Mill (c) 220
    - Devils Brook near Princeton Junction (c) 221
  - Millstone River at Penns Neck (c) 222
    - Stony Brook at Province Line Road near Princeton (c) 223
    - Stony Brook at Princeton (d) 224
    - Stony Brook at Alexander Road at Princeton (c) 225
    - Heathcote Brook at Kingston (c) 227
  - Millstone River at Kingston (c) 229
    - Beden Brook near Rocky Hill (c) 230
      - Pike Run near Rocky Hill (c) 232
    - Six Mile Run near Middlebush (c) 234
  - Millstone River at Blackwells Mills (dc) 236
  - Millstone River at Weston (c) 239
    - Royce Brook at South Main Street at Manville (c) 241
- Raritan River Below Calco Dam at Bound Brook (d) 243
  - Bound Brook:
    - Green Brook at Plainfield (d) 244
    - Stony Brook at Watchung (d) 245
  - Bound Brook at Middlesex (d) 246
- Raritan River near South Bound Brook (cbts) 247
- Raritan River at Landing Lane at New Brunswick (c) 259
  - Lawrence Brook at Davidsons Mill Road near Patricks Corner (c) 260
  - Lawrence Brook at Farrington Dam (d) 262
  - Lawrence Brook at Westons Mills (c) 263
  - South River:
    - Matchaponix Brook (head of South River) near Englishtown (c) 264
      - Barclay Brook near Englishtown (c) 265
    - Matchaponix Brook at Mundy Avenue at Spotswood (c) 266
      - Manalapan Brook at Federal Road near Manalapan (c) 267
      - Manalapan Brook at Helmetta (c) 268
      - Manalapan Brook at Spotswood (d) 269
  - South River at Old Bridge (dc) 270
  - South River below Duhernal Lake at Old Bridge (c) 273
    - Deep Run at Old Bridge (c) 274
      - Tennent Brook near Old Bridge (c) 275
- Reservoirs in Raritan River basin (e) 276
  - Diversions in Raritan River basin 277

MATAWAN CREEK BASIN
- Matawan Creek at Matawan (c) 278

NAVESINK RIVER BASIN
- Hop Brook:
  - Willow Brook near Holmdel (c) 279
  - Yellow Brook at Colts Neck (c) 281
- Swimming River (head of Navesink River) near Red Bank (dc) 283
  - Pine Brook at Tinton Falls (c) 285
  - Shadow Lake outlet at Red Bank (c) 287

SHREWSBURY RIVER BASIN
- Parkers Creek:
  - Wampum Brook at Eatontown (c) 288

SHARK RIVER BASIN
- Shark River near Neptune City (dc) 289
  - Jumping Brook near Neptune City (c) 291

MANASQUAN RIVER BASIN
- Manasquan River near Georgia (c) 293
  - Marsh Bog Brook at Squankum (c) 295
- Manasquan River at Squankum (dc) 297
- Manasquan River at Squankum-Allenwood Road at Allenwood (c) 300

METEDECONK RIVER BASIN
- North Branch Metedeconk River near Wyckoff Mills (c) 301
  - Muddy Ford Brook at Greenville (c) 302
- North Branch Metedeconk River near Lakewood (d) 303
  - South Branch Metedeconk River near Jacksons Mills (c) 304
  - South Branch Metedeconk River near Laureltown (c) 305

KETTLE CREEK BASIN
- Kettle Creek at Cedarwood Park (c) 306

TOMS RIVER BASIN
- Toms River near Van Hiseville (c) 307
- Toms River at Lakehurst (c) 308
  - Union Branch near Lakehurst (c) 309
  - Ridgeway Brook at Rt. 70 near Lakehurst (c) 310
- Toms River near Toms River (dcbts) 311
    - Michaels Run near Keswick Grove (c) 322
    - Davenport Branch near Dover Forge (c) 323
  - Jakes Brook at South Toms River (c) 324

CEDAR CREEK BASIN
- Webbs Mill Branch near Whiting (c) 325
- Cedar Creek at Cedar Crest (c) 326
- Cedar Creek at Double Trouble (c) 327
- Cedar Creek at Lanoka Harbor (c) 328

GAGING STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

Page

FORKED RIVER BASIN

North Branch Forked River near Forked River Mountain (c) 330
North Branch Forked River at Forked River (c) 331

OYSTER CREEK BASIN

Oyster Creek near Brookville (dct) 333

MILL CREEK BASIN

Mill Creek near Manahawkin (c) 337
Fourmile Branch near Brookville (c) 339
Fourmile Branch near Manahawkin (c) 340
Mill Creek at Manahawkin (c) 341

WESTECUNK CREEK BASIN

Governors Branch near Stafford Forge (c) 343
Westecunk Creek at Stafford Forge (d) 344
Westecunk Creek at West Creek (c) 345

MULLICA RIVER BASIN

Mullica River near Atco (c) 347
Mullica River at Jackson Road, near Indian Mills (c) 348
Mullica River at outlet of Atsion Lake at Atsion (c) 349
Mullica River near Batsto (d) 351
Wildcat Branch at Chesilhurst (c) 352
Sleeper Branch Diversion Channel near Atsion (c) 353
Pump Branch at Ancora (c) 355
Blue Anchor Brook at Ancora (c) 356
Albertson Brook near Hammonton (c) 357
Great Swamp Branch at Elm (c) 358
Great Swamp Branch near Hammonton (c) 359
Nescochague Creek at Pleasant Mills (c) 360
Mullica River at Pleasant Mills (c) 361
Hammonton Creek at Route 30 at Hammonton (c) 363
Hammonton Creek at Hammonton (c) 364
Hammonton Creek at Wescoatville (c) 365
Nortons Branch near Sweetwater (c) 367
Batsto River:
Batsto River at Hampton Gate (c) 368
Batsto River near Hampton Furnace (c) 369
Indian Mills Brook near Indian Mills (c) 370
Springers Brook near Indian Mills (c) 371
Springers Brook near Hampton Furnace (c) 373
Batsto River at Quaker Bridge (c) 374
Batsto River at Batsto (dc) 376
Batsto River at Pleasant Mills (e) 378
Lucas Branch near Sweetwater (c) 379
Lucas Branch at Sweetwater (c) 380
Mullica River at Green Bank (c) 381
Pine Creek at Weekstown (c) 382
Landing Creek near Egg Harbor City (c) 383
Landing Creek near Weekstown (c) 385
Tar Kiln Branch near Port Republic (c) 386
Gates Branch near Chatsworth (c) 387
West Branch Wading River at Chatsworth (c) 388
West Branch Wading River at Route 563 at Dukes Bridge (c) 389
West Branch Wading River at Jenkins (d) 390
Tulpehocken Creek near Jenkins (c) 391
West Branch Wading River at Maxwell (c) 392
Oswego River at Route 72 near Brookville (c) 394
Yellow Dam Branch at Route 72 near Brookville (c) 395
Papoose Branch near Sims Place (c) 396
Oswego River at Oswego Lake (c) 397
Oswego River at Harrisville (dc) 398
Beaver Run at Harrisville (c) 401
Wading River at Wading River (c) 402
Bass River:
East Branch Bass River at Dans Bridge (c) 403
East Branch Bass River near New Gretna (c) 404
West Branch Bass River tributary near Harrisville (c) 406
West Branch Bass River near New Gretna (c) 407
Bass River at New Gretna (c) 408

ABSECON CREEK BASIN

Absecon Creek at Absecon (d) 409

GREAT EGG HARBOR RIVER BASIN

Great Egg Harbor River at Berlin (c) 410
Great Egg Harbor River near Sicklerville (cs) 412
Pond above Great Egg Harbor River tributary at Sicklerville (c) 414
Great Egg Harbor River tributary at Sicklerville (dcs) 415
West outlet New Brooklyn Lake at Winslow Crossing (c) 418
Great Egg Harbor River tributary No. 2 at Winslow Crossing (c) 420
Fourmile Branch at Winslow Crossing (c) 422
Infiltration Pond at Sewage Treatment Plant at Winslow Crossing (c) 423
Fourmile Branch at New Brooklyn (dcs) 424
Great Egg Harbor River near Blue Anchor (dcs) 427
Squankum Branch at Malaga Road near Williamstown (c) 430
Great Egg Harbor River at Folsom (dc) 432
Hospitality Branch at Berryland (c) 437
Hospitality Branch at Penny Pot (c) 438
Great Egg Harbor River at Weymouth (c) 440
Deep Run near Weymouth (c) 441
Great Egg Harbor River at Mays Landing (c) 443
Babcock Creek near Mays Landing (c) 444

GAGING STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

	Page
TUCKAHOE RIVER BASIN	445
Tuckahoe River near Estell Manor (c)	
Tuckahoe River at Head of River (dc)	446
Tuckahoe River at Head of River (dc)	
GREAT EGG HARBOR BAY	449
Beach Thorofare at Atlantic City (e)	450
Ludlam Thorofare at Sea Isle City (e)	451
Townsend Channel at Townsends Inlet (e)	468
GROUND-WATER LEVEL RECORDS	468
Camden County	469
Essex County	470
Mercer County	470
Morris County	471
Ocean County	
..... 472	473
Union County	474
QUALITY OF GROUND-WATER RECORDS	

INTRODUCTION

Water resources data for the 1977 water year for New Jersey consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground water. This volume of the report contains discharge records for 66 gaging stations; tide summaries for 4 stations; stage and contents for 15 lakes and reservoirs; water quality for 36 gaging stations, 159 partial-record flow stations, 1 reservoir, and 147 wells; and water levels for 11 observation wells. Also included are data for 50 crest-stage partial-record stations and 45 low-flow partial-record stations. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in New Jersey.

Records of discharge or stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States." Through water year 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States."

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released either in separate reports or in conjunction with streamflow records. Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published as an offical Survey report on a State-boundary basis. These offical Survey reports carry an identification number consisting of the two letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume of the report is identified as "U.S. Geological Survey Water-Data Report NJ-77-1." Water-Data reports are for sale by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161. Limited copies of this report are available locally and may be obtained from District Chief, WRD (for address see Page IV).

COOPERATION

This report was prepared by the U.S. Geological Survey under cooperative agreement with the following organizations:

New Jersey Department of Environmental Protection, Daniel J. O'Hern, commissioner.
Division of Water Resources, Jeff Zelikson, director.
Division of Fish, Game and Shell Fisheries, Russell A. Cookingham, director.
New Jersey Department of Agriculture, Phillip Amampi, secretary.
Division of Rural Resources, Richard D. Chumney, director.
Delaware River Basin Commission, James F. Wright, executive director.
North Jersey District Water Supply Commission, Dean C. Noll, chief engineer.
Passaic Valley Water Commission, W.E. Inhoffer, general superintendent and chief engineer.
County of Bergen, V.J. Nunno, director of Public Works and E.R. Ranuska, county engineer.
Camden County, Joseph T. Patermo, director of Camden County Planning Board.

Assistance in the form of funds was given by the Corps of Engineers, U.S. Army, in collecting records for 36 stations, and for the collection of sediment records at two stream-sampling stations and by the U.S. Environmental Protection Agency for the collection of chemical analyses at four stream-sampling stations. In addition, several stations were operated fully or partially from funds appropriated directly to the Geological Survey. Assistance was also furnished by the National Weather Service.

Basic water-quality data collected at many sampling stations on the main stem of the Delaware River and estuary--an interstate stream--included in this report were collected in cooperation with the following additional agencies:

City of Philadelphia Water Department, Carmen Guarino, commissioner.
Pennsylvania Department of Environmental Resources, Maurice K. Goddard, secretary.
Delaware Geological Survey, Robert R. Jordan, State geologist.
Delaware River Master, Francis P. Schaefer.

The following organizations aided in collecting records:

Municipalities of Atlantic City, Jersey City, Newark and New Brunswick; American Cyanamid Co.; Elizabethtown Water Co.; Hackensack Water Co.; Johns-Manville Products Corp.; and Monmouth Consolidated Water Co.

Organizations that supplied data are acknowledged in station descriptions.

ACKNOWLEGMENTS

New Jersey District personnel who contributed significantly to the collection and preparation of the data in this report were: A.A. Vickers, Chief, Hydrologic Records Section, assisted by E.W. Moshinsky; J.C. Schornick, Chief, Water Quality Section, assisted by G.R. Kish.

HYDROLOGIC CONDITIONS

Streamflow during the 1977 water year continued to decrease and ranged from about average in the Delaware River Basin to about 70 percent of normal throughout the remainder of New Jersey. The severe cold weather combined with deficient precipitation in January and February caused some very low flows for that period. The below-normal rainfall continued from April through September and resulted in annual mean discharges, at many stations, which were the lowest since the end of the severe drought in 1966. There was no significant flooding in New Jersey in 1977.

The chemical quality of surface waters throughout New Jersey diminished somewhat as a consequence of below normal discharge. Due to severe cold weather conditions, increased road salting occurred. As a result, significant increases in sodium and chloride were observed in the surface waters during the winter months.

Ground-water aquifers under water table conditions generally exhibited water levels slightly below average during the year. In the more heavily stressed artesian aquifers, a continued downward trend was noted. New low levels were reached at many sites during the heavily pumped period between July and September.

Monthly and annual discharge is compared with medians at three representative gaging stations in figures 3 and 4. The streamflow stations chosen for illustration were South Branch Raritan River near High Bridge and Great Egg Harbor River at Folsom, which reflect runoff conditions in the northern and southern parts of the State, respectively, and Delaware River at Trenton in which there is widespread interest.

Streamflow at South Branch Raritan River near High Bridge for the year averaged 118 ft^3/s (3.34 m^3/s), 99 percent of normal. The average flow for Great Egg Harbor River at Folsom was 57.2 ft^3/s (1.62 m^3/s), 66 percent of normal. The observed annual mean discharge on the Delaware River at Trenton was 12,160 ft^3/s (344.4 m^3/s), 104 percent of normal. The natural flow at Trenton (adjusted for diversion and storage upstream) was 113 percent of normal for the year.

Storage in the 13 major water-supply reservoirs in New Jersey decreased from 61.1 billion gallons (80 percent of usable capacity) on October 1 to 45.4 billion gallons (59 percent of usable capacity) on September 30. Storage in Wanaque Reservoir decreased from 23.1 billion gallons (83 percent of usable capacity) on October 1 to 16.4 billion gallons (59 percent of usable capacity) on September 30. Pumped storage in Round Valley Reservoir on September 30 was 51.6 billion gallons (94 percent of capacity), a decrease of 0.5 billion gallons during the year.

DEFINITION OF TERMS

Terms related to streamflow, water-quality and other hydrologic data, as used in this report, and defined below. See also the table for converting English units to International System of Units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Adenosine triphosphate (ATP) is the primary energy donor in cellular life process. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measure of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per litre of the original water sample.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present present at stationary phase and is expressed as milligrams dry weight of algae produced per litre of sample.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer, trapped by the well. A flowing artesian well is one in which the water level is above land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rod-like, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonsporeforming, rodshaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacteria growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warmblooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacteria growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on M-enterrococus medium (nutrient medium for bacteria growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Bedload is the sediment which moves along in essentially continuous contact with the streambed by rolling, sliding, and making brief excursions into the flow a few diameters above the bed.

Bed material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per litre, used for the decomposition of organic matter by microrganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the weight per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3) and periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and the ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters.

Chemical oxygen demand (COD) indicates the quantity of oxidizable compounds in water and varies with water composition(s), temperature, period of contact, and other factors.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common pigments in plants.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Continuing record station is a specified site which meets one or all conditions listed:

1. When chemical samples are collected daily or monthly for 10 or more months during the water year.
2. When water temperature records include observations taken once or more times daily.
3. When sediment discharge records include those periods for which sediment loads are computed and are considered to be representative of the runoff for the water year.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, and artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (cfs) is the rate of discharge representing a volume 1 cubic foot passing a given point during 1 second, and is equivalent to 7.48 gallons per second or 448.8 gallons per minute.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

Mean discharge (Mean) is the arithmetic mean of individual daily mean discharge during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to the amount of a substance present in true chemical solution. In practice, however, the term includes all forms of the substance that will pass through a 0.45-micrometre membrane filter, and thus may include some very small (colloidal) suspended particles. Analyses are performed on filtered samples.

Diversity index is a numerical expression of evenness of aquatic organisms. The formula for diversity index is:

$$\bar{d} = -\sum_{i=1}^{s} \frac{n_i}{n} \log_2 \frac{n_i}{n}$$

Where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Diversity index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or body of impounded surface water together with all tributary surface stream and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

High tide is the maximum height reached by each rising tide.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Low tide is the minimum height reached by each falling tide.

Mean high or low tide is the average of all high or low tides, respectively, over a specified period.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synethetic detergent compounds.

Micrograms per gram (μg/g) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (gram) of sediment.

Micrograms per litre (UG/L, μg/l) is a unit expressing the concentration of chemical constituents in solution as weight (micrograms) of solute per unit volume (litre) of water. One thousand micrograms per litre is equivalent to one milligram per litre.

Milligrams per litre (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per litre presents the weight of solute per unit volume of water. Milligrams or micrograms per litre may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per litre by multiplying by the factors in table 1, p. 5. Concentration of suspended sediment also is expressed in mg/l, and is based on the weight of sediment per litre of water-sediment mixture. Sediment concentrations may be converted to parts per million by using the factors in table 2, p. 5.

National Geodetic Vertical Datum of 1929 (NGVD), formerly called "Sea Level Datum of 1929". A geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. In the adjustment, sea levels from selected Tide stations in both countries were held as fixed. NGVD has been substituted for the previously used term "mean sea level" in the Gage paragraph.

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Organism count/area refers to the number of organism collected and enumerated in a sample and adjusted to the number per area habitat, usually square meters (m^2), acres, or hectares. Periphyton benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliters (mL) or liters (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Partial-record station is a particular site where limited streamflow data are collected systematially over a period of years for use in hydrologic analyses.

Table 1.--Factors for conversion of chemical constituents in milligrams or micrograms per litre to milliequivalents per litre

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})*...	0.11119	Iodide (I^{-1}).....	0.00788
Ammonia as NH_4^{+1} ...	.05544	Iron (Fe^{+3})*.....	.05372
Barium (Ba^{+2})......	.01456	Lead (Pb^{+2})*.....	.00965
Bicarbonate (HCO_3^{-1})	.01639	Lithium (Li^{+1})*..	.14411
Bromide (Br^{-1}).....	.01251	Magnesium (Mg^{+2}).	.08226
Calcium (Ca^{+2}).....	.04990	Manganese (Mn^{+2})*	.03640
Carbonate (CO_3^{-2})...	.03333	Nickel (Ni^{+2})*...	.03406
Chloride (Cl^{-1})....	.02821	Nitrate (NO_3^{-1})...	.01613
Chromium (Cr^{+6})*...	.11539	Nitrite (NO_2^{-1})...	.02174
Cobalt (Co^{+2})*.....	.03394	Phosphate (PO_4^{-3}).	.03159
Copper (Cu^{+2})*.....	.03148	Potassium (K^{+1})..	.02557
Cyanide (CN^{-1}).....	.03844	Sodium (Na^{+1})....	.04350
Fluoride (F^{-1}).....	.05264	Strontium (Sr^{+2})*	.02283
Hydrogen (H^{+1}).....	.99209	Sulfate (SO_4^{-2})...	.02082
Hydroxide (OH^{-1})...	.05880	Zinc (Zn^{+2})*.....	.03060

*Constituent reported in micrograms per litre; multiply by factor and divide results by 1,000.

Table 2.--Factors for conversion of sediment concentration in milligrams per litre to parts per million*
(All values calculated to three significant figures)

Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

*Based on water density of 1.000 g/ml and a specific gravity of sediment of 2.65.

Particle size is the diameter, in millimetres (mm), of suspended sediment or bed material determined either by seive or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in active water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay..........	0.00024 - 0.004	Sedimentation.
Silt..........	.004 - .062	Sedimentation.
Sand..........	.062 - 2.0	Sedimentation or sieve.
Gravel........	2.0 - 64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispesion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass or volume.

Periphyton is the assemblage of microorganisms attached to and growing upon solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

Pesticides are chemical compounds used to control the growth of undesirable plants and animals. Major categories of pesticides includes insecticides, miticides, fungicides, herbicides, and rodenticides. Since the first application of DDT as an insecticide in the early 1930's there have been almost 60,000 pesticide formulations registered, each containing at least one of the approximately 800 differenct basic pesticide compounds. The United States annually produces about 1 billion pounds of these compounds. Although efforts are being made to substitute many of the chlorinated hydrocarbon pesticides with more specific, fast-acting, and easily degradable compounds, chlorinated hydrocarbon pesticides are still commonly used in many areas of the country.

Picocurie (CP, pCi) is one trillionth (1×10^{-12}) of the amount radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substance. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per millilitre of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per millilitre of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [mg C/(m^2.time) for periphyton and macrophytes and mg C/(m^3.time)] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity that the oxygen light and dark bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [mg O_2/(m^2.time) for periphyton and macrophytes and mg O_2/(m^3.time)] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Radioisotopes are isotopic forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in che- differ in the number of neutrons in the neutrons in the necleus. For example: Ordinary chlorine is a mixture of isotopes having atomic weights 35 and 37, with the natural mixture having atomic weight about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron (Rose, 1966). There are 275 isotopes of the 81 stable elements in addition to over 800 radioactive isotopes.

Radioisotopes that are determined in this report are natural uranium in µg/l (micrograms per litre), radium as radium-226 in PC/L, (pCi/l, picocuries per litre), gross beta in PC/L, and gross alpha radiation as micrograms of uranium equivalent per litre (µg/l). Gross alpha and beta radioactivity associated with the fine grained (silt and clay sized) sediments in the samples are also determined.

River mile as used herein, is the distance above the mouth of Delaware Bay, measured along the center line of the navigation channel or the main stem of the Delaware River. River mile data were furnished by the Delaware River Basin Commission.

Runoff in inches (IN, in) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transformed by, suspended in, or deposited from water, it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Supended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight, or by volume, that is discharged in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Suspended-sediment load is quantity of suspended sediment passing a section in a specified period.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimetre at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content in the water. Commonly, the amount of dissolved solids (in milligrams per litre) is about 65 percent of the specific conductance (in micromhos per cm at 25°C). This relation is not constant from stream to stream or from well to well, and it may even vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height and the amount of water flowing in a channel, expressed as volume per unit of time.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff." Streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physcial surface upon which an organism lived.

Natural substrates refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lived.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multi-plate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Surface area of a lake is that area outlined on the latest U.S.G.S. topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered.

All areas shown are those for the stage when the planimetered map was made.

Surficial bed material is that part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of the total concentration in a water-sediment mixture. The water-sediment mixture is associated with (or sorbed on) that material retained on a 0.45 micrometer filter.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperatures of a stream. "Temperature recorder" is the term used to indicate the location of the thermograph or a digital mechanism that automatically records water temperature on paper tape.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of a substance is solution or suspension that passes a stream section during a 24-hour day.

Total (as used in tables of chemical analyses) refers to the amount of a substance that is present both in solution and in suspension. Analyses are performed on representative samples of water-suspended sediment mixtures.

Total load (tons) is the total quantity of any individual constituent, as measured by dry mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the mg/L of the constituent, times the factor 0.0027, times the number of days.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organism have in common. For example, the taxonomy of a particular mayfly, Hexagenia limbata is the following:

Kingdom.................Animal
Phylum..............Arthropoda
Class..................Insecta
Order............Ephemeroptera
Family.............Ephemeridae
Genus................Hexageria
Species......Hexagenia limbata

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WRD is used as an abbreviation for "Water-Resources Data" in the summary REVISIONS paragraph to refer to previously published State annual basic-data reports. From Water Year 1976, it has been changed to WDR, and abbreviation for "Water-Data Report".

WSP is used as an abbreviation for "Water-Supply Paper" in reference to previously published reports.

DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indention in a list of stations in front of the report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station such as 01463500, which appears just to the left of the station name, includes the 2-digit part number "01" plus the 6-digit downstream order number "463500."

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

Miscellaneous downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

The wells and miscellaneous site numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits is a sequential number for wells within a 1-second grid. In the event that the latitude-longitude coordinates for a well and a miscellaneous site are the same, assign sequential number "01", "02", etc. as one would for wells. See figure 1 below.

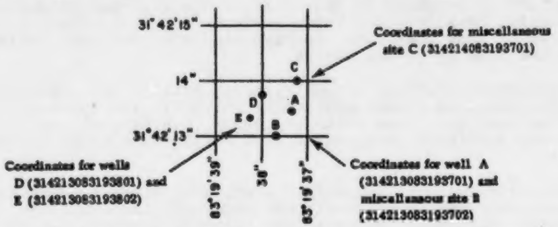
31°42'15"
14"
31°42'13"
83°19'39"
38"
83°19'37"
C
D
A
E
B
Coordinates for miscellaneous site C (314214083193701)
Coordinates for wells D (314213083193801) and E (314213083193802)
Coordinates for well A (314213083193701) and miscellaneous site B (314213083193702)

Figure 1. System for numbering wells and miscellaneous sites (latitude and longitude)

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams where potential contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and computation of Data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are decribed in standard text-books, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resouces Investigations, book 3, chapter A6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in determining discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in determining discharge.

At some northern stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed. Discharge over spillways is computed from a stage-discharge relation curve defined by discharge measurements.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise daily contents may be estimated on the bais of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage height are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location for the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present stations or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use, the datum of the present gage relative to NGVD, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE". In references to datum of gage, the phrase National Geodetic Vertical Datum (NGVD), see definition of terms, refers to "Sea Level Datum of 1929" which was previously called "mean sea level".

Information pertaining to the accuracy of the dicharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS." For reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than 10 percent. Under "EXTREMES" are given first the extremes for current year, second, the extremes for the period of record, and last, information availalbe outside the period of record. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest-stage obtained by use of a water-stage recorder (graphic or digital), a crest- stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with EXTREMES FOR THE CURRENT YEAR; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

Skeleton rating tables are published, immediately following EXTREMES, for stream-gaging stations where they serve a useful purpose and the dates of applicability can be easily identified.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"), or in acre-feet (line headed "AC-FT). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches. In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharge are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations follow the information for continuous record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations.

Accuracy of field data and computed results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretation of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are with 5 percent; "good" within 10 percent; and "fair" with 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Publications

Each volume of the 1960 series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States" contains a listing of the numbers of all water-supply papers in which records of surface-water data were published for the area covered by the individual volumes. Each volume also contains a list of water-supply papers that give detailed information on major floods for the area. A new series of water-supply papers containing surface-water records for the 5-year period October 1, 1965 to September 30, 1970, also will include lists of annual and special reports published as water-supply papers.

Records through September 1950 for the area covered by this report have been compiled and published in Water-Supply Paper 1302; records for October 1950 to September 1960 have been compiled and published in Water-Supply Paper 1722; records for October 1960 to September 1965 have been compiled and published in Water-Supply Paper 1902; records for October 1965 to September 1970 have been compiled and published in Water-Supply Paper 2102. These reports contain summaries of monthly and annual discharge and month-end storage for all previously published records, as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station.

Special reports on major floods or droughts or of other hydrologic studies for the area have been issued in publications other than water-supply papers. Information relative to these reports may be obtained from the district office.

Other data available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge measurements, gage-height records, and rating tables is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

Records of stage or discharge collected by agencies other than the Geological Survey

Records of stage or discharge not published by the Geological Survey were collected in New Jersey at 40 sites during the water years October 1960 to current year by the following agencies: records at 7 sites were collected by New Jersey State Department of Environmental Protection; at 4 sites by the North Jersey District Water Supply Commission; at 14 sites by Passaic County; at 5 sites by the National Weather Service; at 2 sites by the National Ocean Survey; at 3 sites by the Corps of Engineers, and 5 sites by Delaware River Joint Toll Bridge Commission. The National Water Data Exchange, Water Resources Division, U.S. Geological Survey, National Center, Reston, VA 22092, maintain an index of such sites. Information on records available at specific sites can be obtained upon request.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and examination of data

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used in conjunction with the computations of the chemical constituents and sediment loads.

The data in this report include a description of the sampling station and tabulations of the samples analyzed. The description of the sampling station gives the location, drainage area, periods of record for the various water-quality data, extremes of the pertinent data, and general remarks, in a format similar to that used for streamflow gaging stations. For ground-water sampling stations, no descriptive statements are given. However, the well number, depth of well, date of sampling, and/or other pertinent data are given in the table containing the chemical analyses of ground water.

Water-quality information is presented for chemical, biological, and microbiological quality, water temperature, and fluvial sediment. Chemical quality includes concentrations of characteristics of individual dissolved constituents and certain properties or characteristics such as hardness, specific conductance, and pH. The biological information includes qualitative and quantitative analyses of plankton, bottom organisms, and particulate inorganic and amorphous matter present. Microbiological information includes quantitative identification of certain bacteriological indicator organisms. Water-temperature data represent once-daily observations except for stations where a continuous temperature recorder (thermograph) furnishes information from which daily minimums and maximums are obtained, or else where a water-quality noncontinuous-digital monitor furnishes hourly temperature readings that provide daily maximum, minimum, and mean temperature data summaries. Fluvial-sediment information is given for suspended-sediment discharges and concentrations and for particle-size distribution of suspended sediment.

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967, the U.S. Geological Survey began reporting data for chemical constituents and concentrations of suspended sediment in milligrams per litre (mg/L) and water temperatures in degrees Celsius (°C). In waters with a density of 1.000 g/ml (grams per millilitre), parts per million and milligrams per litre can be considered equal. In waters with a density greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per litre. Temperatures reported in degrees Celsius may be converted to degrees Fahrenheit by using the table below.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per litre instead of milligrams per litre. (See "Definitions of Terms," p. 4 and table for converting English Units to SI Units, inside back cover).

Table 3.--Degrees Celsius (°C) to degrees Fahrenheit (°F)* (Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.4	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

°C = 5/9 (°F - 32) or °F = 9/5 (°C) + 32.

Solutes

Most methods for collecting and analyzing water samples to determine the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman. The method for determining elemental constituents by emission spectrographic techniques is described by Barnett and Mallory. Analysis of pesticides, herbicides, and organic substances in water are described by Goerlitz and Lamar, Lamar, Goerlitz, and Law, and Goerlitz and Brown. The collection and analysis of aquatic, biological and microbiological samples are described by Slack and others.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the possible case where an apparent inconsistency exists between the reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory. Field determination of carbonate and bicarbonate was initiated September 1976.

The daily chemical quality data in this report generally represent equal-volume composites for 2-to 30-day periods; the composite periods are selected on the basis of specific conductance of the daily samples and fluctuation of water discharge.

For Chemical-quality stations equipped with noncontinuous-digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the U.S. Geological Survey district office (for address see Page IV).

Ground-water normally does not change significantly during short periods of time; infrequent sampling and analysis of ground water adequately defines ground-water quality at a given site. Water samples from wells are analyzed individually.

Water temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for surface-water stations. For daily stations, the water temperatures are taken at about the same time each day when sample is collected. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges. Influential factors, field measurement, and data representation of temperature are described by Stevens, Ficke and Smoot.

At stations where continuously recording thermographs are present, the records consist of maximum and minimum continuous-digital water quality monitor which provide hourly readings, the records consist of daily maximum, minimum, and mean temperature data summaries.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross-section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the sub-divided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the sub-divided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment are included.

REMARK CODES FOR WATER-QUALITY DATA

PRINTED OUTPUT	REMARK	PRINTED OUTPUT	REMARK
E	ESTIMATED VALUE	<	ACTUAL VALUE IS KNOWN TO BE LESS THAN THE VALUE SHOWN
>	ACTUAL VALUE IS KNOWN TO BE GREATER THAN THE VALUE SHOWN	ND	MATERIAL SPECIFICALLY ANALYZED FOR BUT NOT DETECTED
B	RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT)		

PUBLICATIONS

Table 4 below, shows the annual series of water-supply papers that give information on quality of surface waters in New Jersey, Section 1. North Atlantic slope basins.

Table 4.--Water-supply paper (WSP) numbers and parts, water years, 1945-70

Year	WSP	Parts	Year	WSP	Parts	Year	WSP	Parts
1945	1030	1-14	1954	1350	1-4	1963	1947	1-2
1946	1050		1955	1400		1964	1954	
1947	1102		1956	1450		1965	1961	
1948	1132	1-4	1957	1520		1966	1991	
1949	1162		1958	1571	1-2	1967	2011	
1950	1186		1959	1641		1968	2091	1
1951	1197		1960	1741		1969	2141	
1952	1250		1961	1881		1970	2151	
1953	1290		1962	1941				

Water-quality criteria

The Federal Water Pollution Control Act Amendments of 1972 (P.L. 92-500) stipulated that water-quality criteria was to be developed to assure the integrity of ground and surface waters of the United States. Criteria were set for various types of water use.

These criteria indicate limiting values of various parameters in water to provide adequate protection of water users, essential aquatic life, and consumers of such aquatic life.

Chemical constituents in bottom sediments (BTM) are reported as weight of constituent per weight of sediment. These limiting values are based not on health effects, but rather on the potential hazard which might be caused if these sediments were suspended into the water phase.

WATER QUALITY CRITERIA

Parameter name	Limiting value	Units	Use	Basis for selection
General Inorganics				
Alkalinity, total (as CACO)	20*	mg/L	2	A
Antimony	50	ug/L	5	C
Antimony, BTM	500	ug/g	5	C
Arsenic	50	ug/L	4,6	A,B,C
	100	ug/L	3	A
Arsenic, BTM	200	ug/g	5	C
Barium	1000	ug/L	4,6	A,B,C
Barium, BTM	2000	ug/g	5	C
Beryllium	11	ug/L	2a	A,C
	100	ug/L	3	A
	1100	ug/L	2b	A
Beryllium, BTM	200	ug/g	5	C
Boron	750	ug/L	3	A
	1000	ug/L	5	C
Cadmium	0.4	ug/L	1a	A
	1.2	ug/L	1b	A
	4.0	ug/L	2a	A
	5.0	ug/L	8	A
	10	ug/L	4,6	A,B,C
	12	ug/L	2b	A
Cadmium, BTM	20	ug/g	5	C
Chloride	250	mg/L	6a	D
Chromium, total	50	ug/L	4,6	A,B,C
	100	ug/L	2	A
Chromium, BTM	200	ug/g	5	C
Color	15	color units	6a	D
	75	color units	4	A
Copper	1000	ug/L	4,6a	A,C,D
Copper, BTM	2000	ug/g	5	C
Cyanide	5	ug/L	2,8	A
	20	ug/L	5	C
Cyanide, BTM	100	ug/g	5	C
Fecal coliform, MF	200†	col/100 mL	7	A
Fecal coliform, MPN	200†	col/100 mL	7	A
Iron	300	ug/L	4,6a	A,D
	1000	ug/L	2	A
Lead, dissolved	50	ug/L	4,6	A,B,C
Lead, total	200	ug/L	5	C
Lead, BTM	500	ug/g	5	C
Manganese	50	ug/L	4,6a	A,D
Mercury	0.05	ug/L	2	A
	0.1	ug/L	8	A
	2	ug/L	4,6	A,B,C
Mercury, BTM	20	ug/g	5	C
Nickel	100	ug/L	2,8	A,C
Nickel, BTM	2000	ug/g	5	C
Nitrate (as N)	10	mg/L	4,6	A,B,C
Nitrite (as N)	1	mg/L	4	A,C
Oxygen, dissolved	5*	mg/L	2	A
pH	6.5-8.5		6a,8	A,C,D
	6.5-9.0		2	A
	5.0-9.0		4	A
Selenium	10	ug/L	4,6	A,B,C
Selenium, BTM	20	ug/g	5	C
Silver	50	ug/L	4,6	A,B,C
Silver, BTM	1000	ug/g	5	C
Solids, total dissolved	500	mg/L	6a	D
Sulfate	250	mg/L	6a	D
Zinc	5000	ug/L	4,6a	A,C,D
Zinc, BTM	5000	ug/g	5	C
Organics				
Aldrin-dieldrin	0.003	mg/L	2	A
Aldrin	0.01	mg/L	9	C
Aldrin, BTM	20	ug/kg	5	C
Chlordane	0.004	ug/L	8	A
	0.01	ug/L	2	A,C
Chlordane, BTM	20	ug/kg	5	C
DDT**	0.001	ug/L	2,8	A
	0.01	ug/L	9	C
DDT, BTM	20	ug/kg	5	C
Demeton	0.1	ug/L	2,8	A
Dieldrin	0.01	ug/L	9	C
Dieldrin, BTM	20	ug/kg	5	C

WATER QUALITY CRITERIA--Continued

Parameter name	Limiting value	Units	Use	Basis for selection
Endosulfan	0.001	ug/L	8	A
	0.003	ug/L	2	A
	0.01	ug/L	9	C
Endrin	0.004	ug/L	2,8	A
	0.01	ug/L	9	C
	0.2	ug/L	4,6	B
Endrin, BTM	20	ug/kg	5	C
Guthion	0.01	ug/L	2,8	A
Heptachlor	0.001	ug/L	2,8	A
	0.01	ug/L	9	C
Heptachlor, BTM	20	ug/kg	5	C
Heptachlor epoxide	0.01	ug/L	9	C
Heptachlor, epoxide, BTM	20	ug/kg	5	C
Lindane	0.004	ug/L	8	A
	0.01	ug/L	2	A,C
	4	ug/L	4,6	A,B
Lindane, BTM	20	ug/kg	5	C
Malathion	0.1	ug/L	2,8	A,C
Malathion, BTM	20	ug/kg	5	C
MBAS (foaming agents)	0.5	mg/L	6a	D
Methoxychlor	0.03	ug/L	2,8	A,C
	100	ug/L	4,6	A,B
Methoxychlor, BTM	20	ug/kg	5	C
Mirex	0.001	ug/L	2,8	A
	.01	ug/L	9	C
Mirex, BTM	20	ug/kg	5	C
Parathion	0.04	ug/L	2,8	A,C
Parathion, BTM	20	ug/kg	5	C
PCB	0.001	ug/L	2,8	A
	0.1	ug/L	9	C
PCB, BTM	20	ug/kg	5	C
Phenols	1.0	ug/L	4	A
	5.0	ug/L	5	C
Toxaphene	0.005	ug/L	2,8	A
	1.0	ug/L	9	C
	5.0	ug/L	4,6	A,B
Toxaphene, BTM	20	ug/kg	5	C
Silvex	10	ug/L	4,6	A,B,C
Silvex, BTM	20	ug/kg		C
2, 4-D	100	ug/L	4,6	A,B,C
2, 4-D, BTM	20	ug/kg	5	C
Radiochemicals				
Radium 226	5	pCi/L	4,6	B,C
Strontium 90	8	pCi/L	4,6	B,C
Tritium	20,000	pCi/L	4,6	B,C
Gross alpha	15	pCi/L	4,6	B,C

* Minimum recommended value
† Log mean, based on not less than five samples
** Including metabolites (DDD and DDE)

Water Use and/or for the Protection of:

1a. Sensitive salmonoid species in soft water
1b. Sensitive salmonoid species in hard water
2. Freshwater aquatic life
2a. Freshwater aquatic life in soft water
2b. Freshwater aquatic life in hard water
3. Crop irrigation
4. Domestic water supply source
5. Recommended limits have not been established; limit set to arbitrarily flag no more than the upper 15 to 20 percent of values nationwide.
6. Potable drinking water, based on health effects
6a. Potable drinking water, based on aesthetic considerations
7. Primary contact
8. Marine aquatic life
9. Minimum non-zero concentration reported by the U.S. Geological Survey Central Water Quality Laboratories system.

Basis for Selection

A. Maximum levels recommended by: Quality Criteria for Water, 1976, U.S. Environmental Protection Agency.
B. Maximum contaminant level established by: National Interim Primary Drinking Water Regulations 1976, U.S. Environmental Protection Agency.
C. Suggested limiting value, U.S. Geological Survey, Quality of Water Branch.
D. Maximum contaminant level recommended for the Proposed Secondary Drinking Water Regulations, U.S. Environmental Protection Agency.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

Only ground-water level data from a basic network of observation wells are published herein. This basic network contains observation wells so located that the most significant data are obtained from the fewest wells in the most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is provided for local needs (see figure 1).

Measurements are made in many types of wells, under varying conditions of access and at different temperatures, hence, neither the method of measurment nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level measurements in this report are given in feet with reference to either mean sea level (msl) or land-surface datum (lsd). Mean sea level, now designated as NGVD, is the datum plane on which the national network of precise levels is based; land-surface datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum above NGVD is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

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PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-four manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 1200 South Eads Street, Arlington, VA 22202 (authorized agent of the Superintendent of Documents, Government Printing Office. Prices are effective January 1978 but are subject to change.

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations".

1-D1. *Water temperature-influential factors, field measurement, and data presentation,* by H. H. Stevens Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages. $1.60.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents,* by W.W.Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages. $0.85

2-D1. *Application of surface geophysics to ground-water investigations,* by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages. $1.90.

2-E1. *Application of borehole geophysics to water-resources investigations,* by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages. $1.75.

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3-A5. *Measurement of peak discharge at dams by indirect methods,* by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages. $0.35.

3-A6. *General procedure for gaging streams,* by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6, 1968, 13 pages. $1.00.

3-A7. *Stage measurements at gaging stations,* by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages. $1.40.

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3-A11. *Measurement of discharge by moving-boat method,* by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages. $1.20.

3-A12. *Fluorometric procedures for dye tracing,* by J. F. Wilson Jr.: USGS--TWRI Book 3, Chapter A12. 1968. 31 pages. $0.35. Not currently available.

3-B1. *Aquifer-test design, observation, and data analysis,* by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages. $0.70.

3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction,* by G. D. Bennett: USGS--TWRI Book 3, Chapter B2 1976. 172 pages. $2.50.

3-C1. *Fluvial sediment concepts,* by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages. $0.65.

3-C2. *Field methods for measurement of fluvial sediment,* by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2, 1970. 59 pages. $2.50.

3-C3. *Computation of fluvial-sediment discharge,* by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages. $2.10.

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5-A3. *Methods for analysis of organic substances in water,* by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages. $0.90.

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5-A5.* *Methods for determination of radioactive substances in water and fluvial sediments,* by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages. $16.00.

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8-B2. *Calibration and maintenance of vertical-axis type current meters,* by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages. $1.10.

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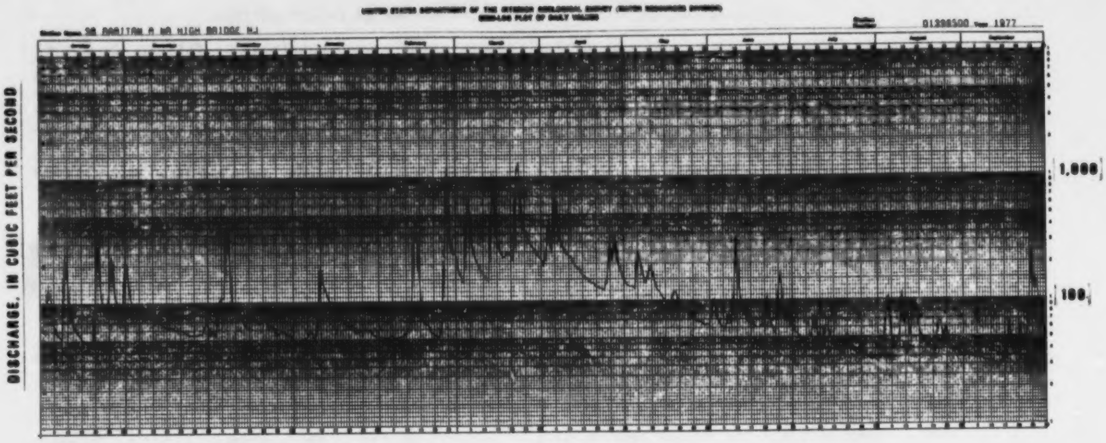
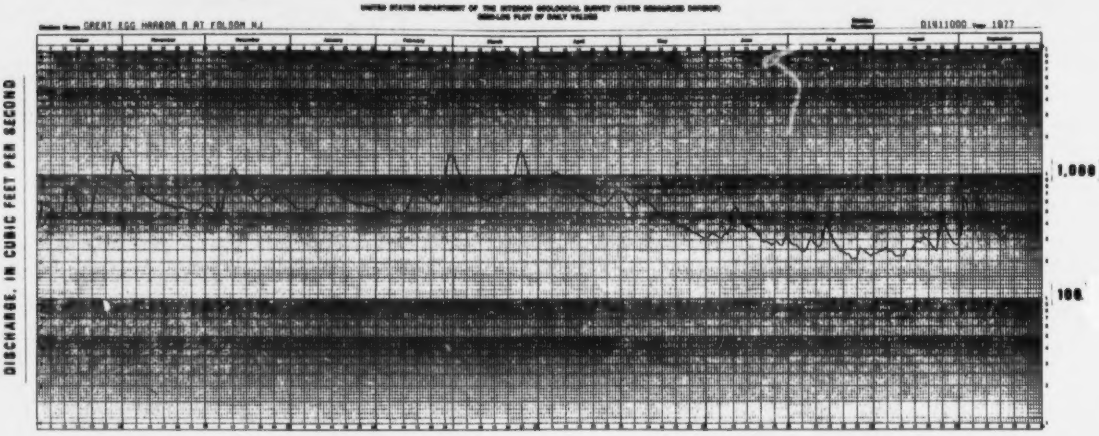




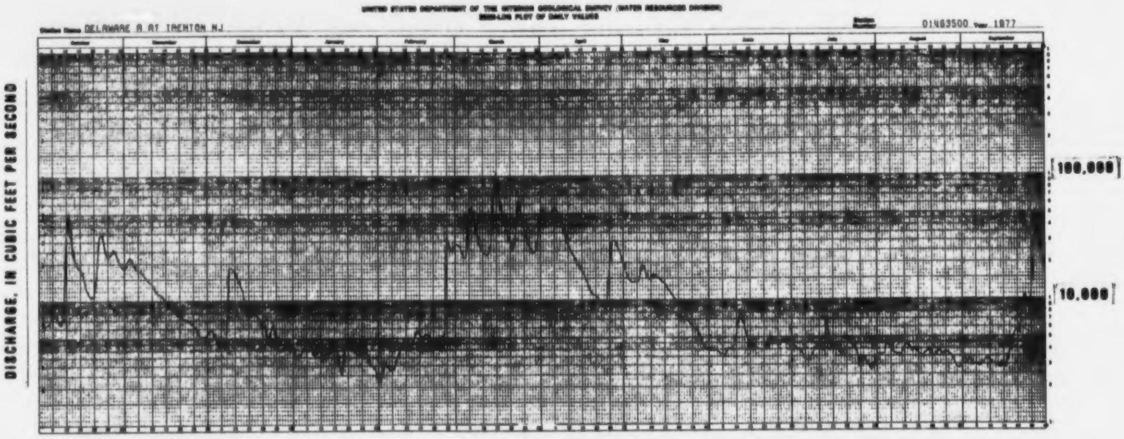
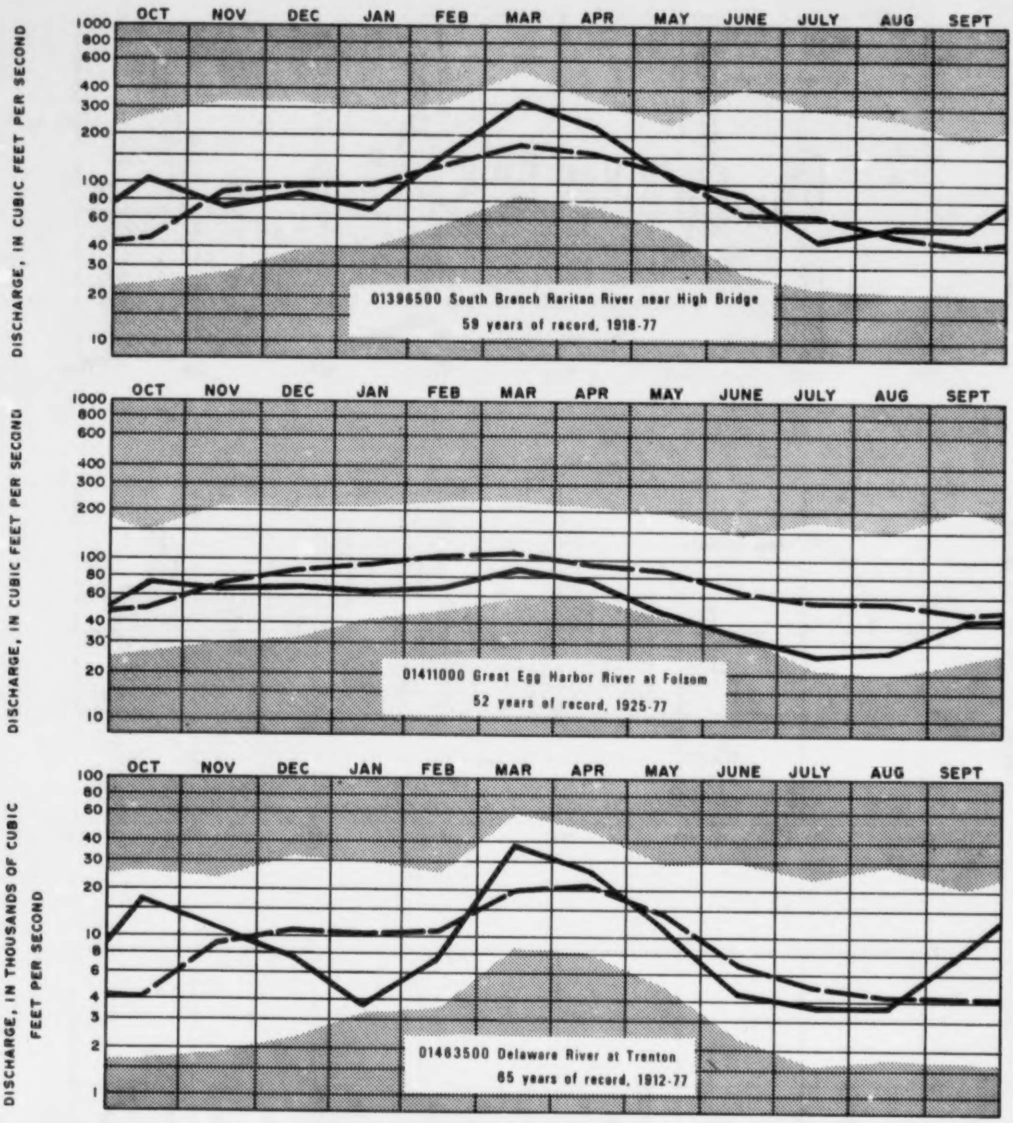


FIGURE 2.--DAILY STREAMFLOW AT KEY GAGING STATIONS



Unshaded area.--Indicates range between highest and lowest mean recorded for the month prior to 1977 water year.

Dashed line.--Indicates normal (median of the monthly means) for the standard reference period 1941-70.

Solid line.--Indicates observed monthly mean flow for the 1977 water year.

FIGURE 3.--MONTHLY STREAMFLOW AT KEY GAGING STATIONS

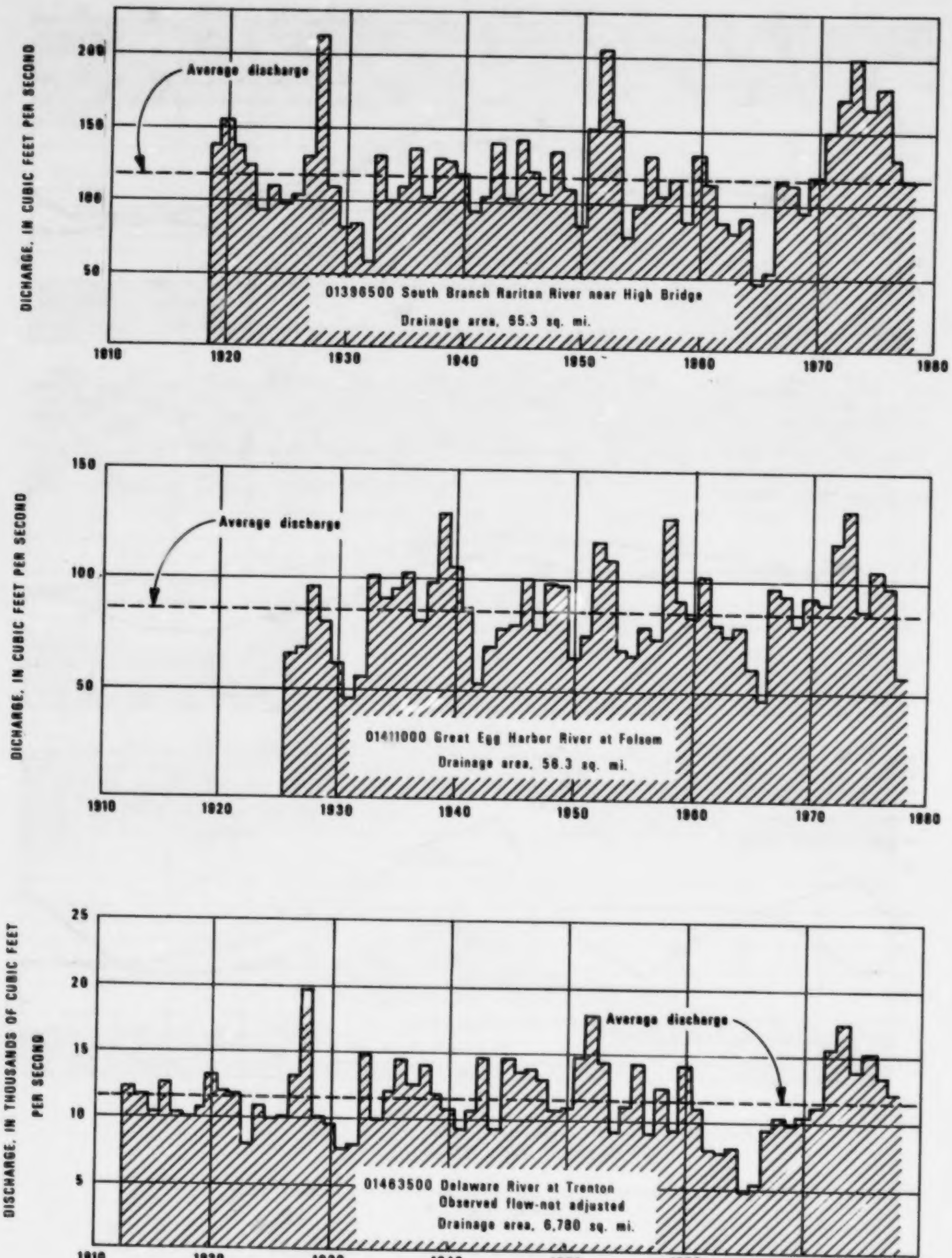


FIGURE 4.--ANNUAL MEAN DISCHARGE AT KEY GAGING STATIONS

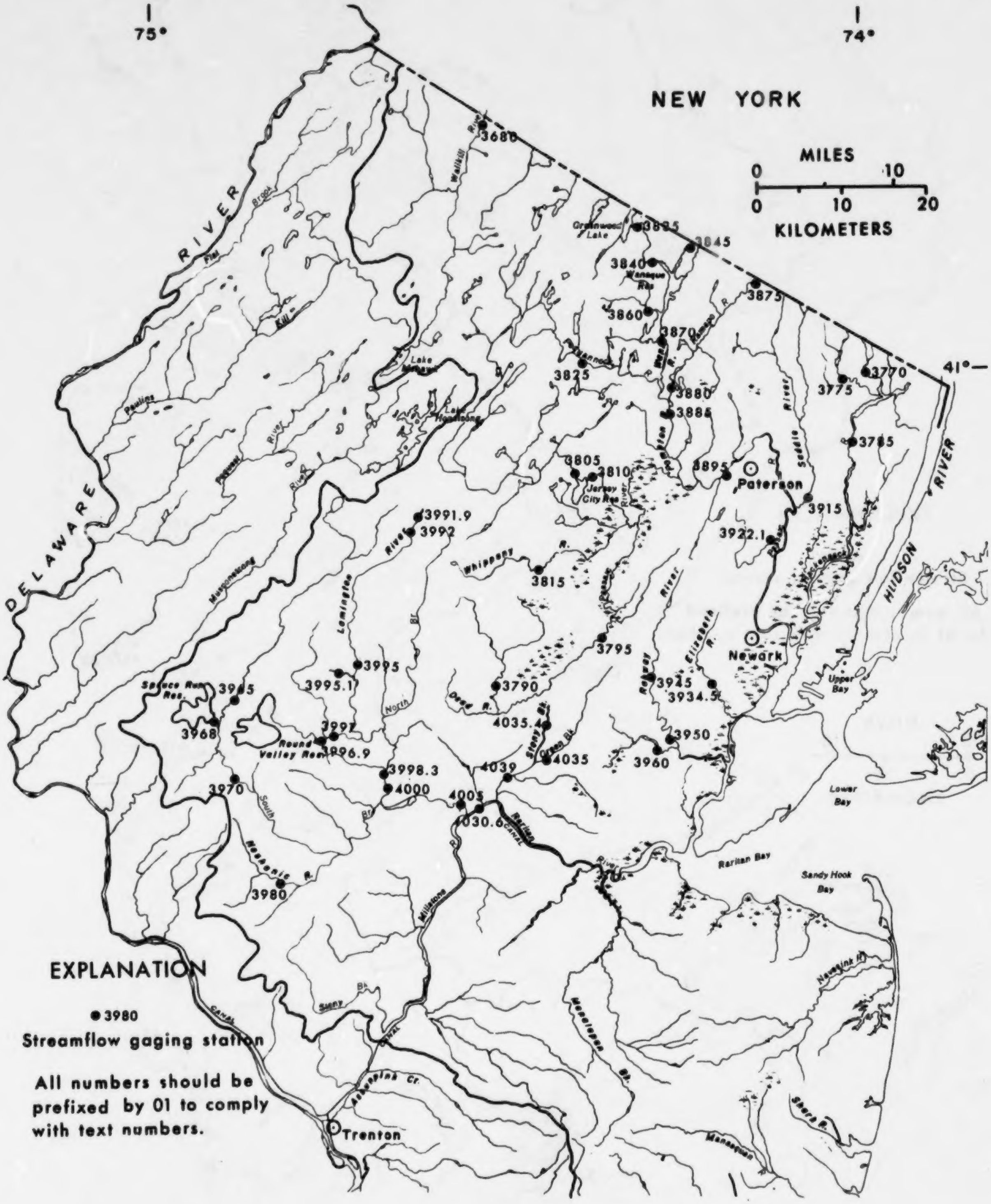

75°
74°
41°
NEW YORK
MILES
0
10
0
10
20
KILOMETERS
DELAWARE RIVER
HUDSON RIVER
Flat Brook
Kill
Paulins
Pequest River
Musconetcong
Lake Hopatcong
Wallkill
Greenwood Lake
Wanaque Res.
Pequannock
Ramapo R.
Saddle River
Passaic
Whippany R.
Rockaway
Lamington River
North Br.
South Br.
Spruce Run Res.
Round Valley Res.
Neshanic R.
Millstone
Stony Bk.
Raritan River
Canal
Dead R.
Green Bk.
Stony Bk.
Rahway River
Elizabeth R.
Hackensack
Jersey City Res.
Paterson
Newark
Trenton
Assunpink Cr.
Manalapan Bk.
Manasquan
Navesink R.
Shark R.
Upper Bay
Lower Bay
Raritan Bay
Sandy Hook Bay
3680
3835
3845
3840
3860
3870
3875
3825
3880
3885
3770
3775
3785
3805
3810
3895
3915
3922.1
3991.9
3992
3815
3795
3995
3995.1
3965
3968
3997
3996.9
3790
3945
3934.5
4035.4
3950
3960
4035
4039
3998.3
4000
4005
4030.6
3970
3980
EXPLANATION
● 3980
Streamflow gaging station
All numbers should be prefixed by 01 to comply with text numbers.

Figure 5.--Map showing location of gaging stations

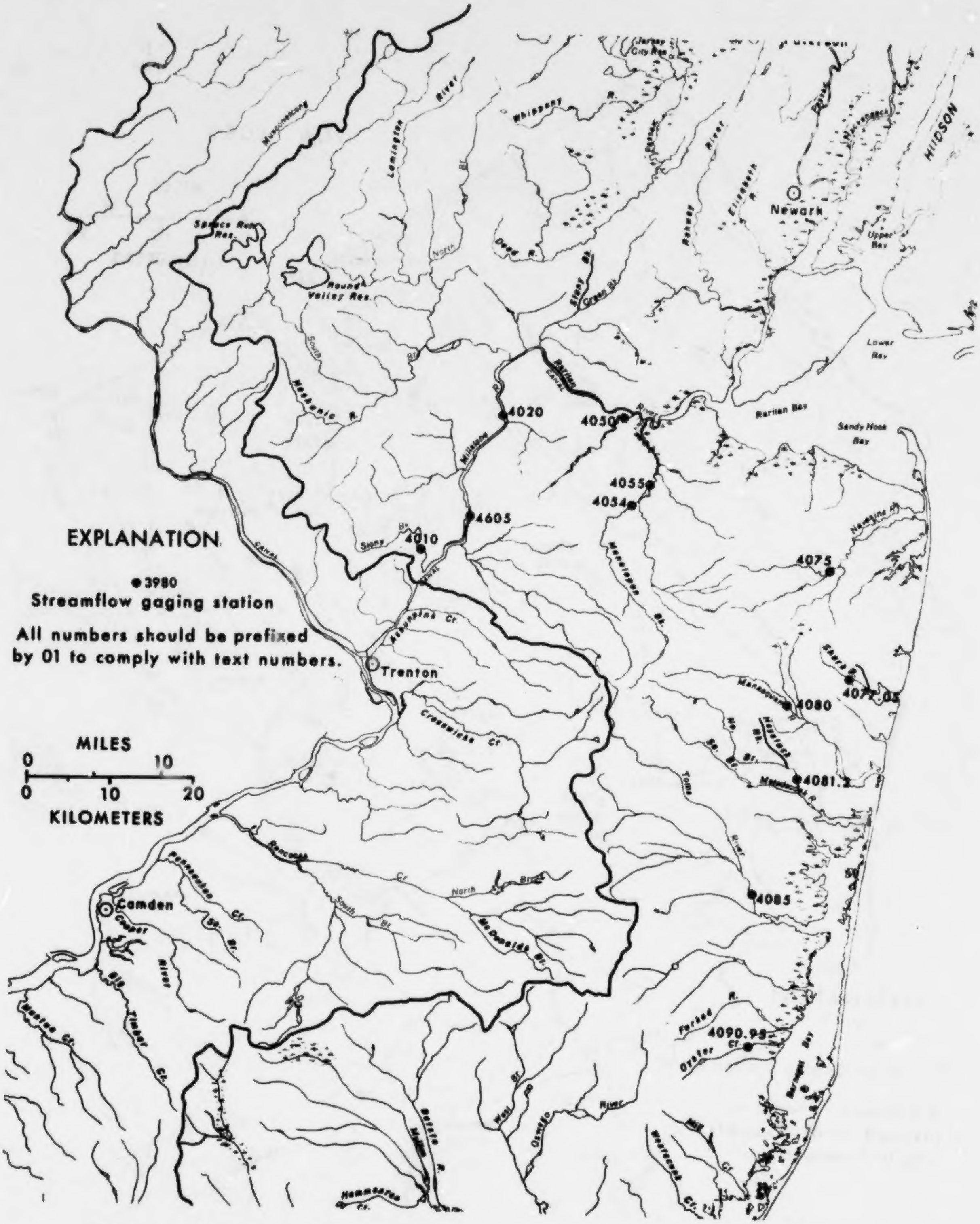

EXPLANATION
●3980
Streamflow gaging station
All numbers should be prefixed by 01 to comply with text numbers.
MILES
0
10
0
10
20
KILOMETERS
Musconetcong
Lamington River
Whippany R.
Passaic
Rahway River
Elizabeth R.
Hackensack
HUDSON
Newark
Upper Bay
Lower Bay
Spruce Run Res.
Round Valley Res.
North Br.
South Br.
Dead R.
Stony Bk
Green Bk
Neshanic R.
Millstone R.
Raritan Canal
Raritan River
Raritan Bay
Sandy Hook Bay
4020
4050
4055
4054
4605
4010
Stony Bk
Canal
Manalapan Bk
4075
Navesink R.
Shark R.
4077.05
Manasquan R.
4080
Assunpink Cr.
Trenton
Crosswicks Cr.
Toms River
4081.2
Metedeconk R.
4085
Rancocas Cr.
North Br.
South Br.
McDonalds Br.
Pennsauken Cr.
Camden
Cooper River
Big Timber Cr.
Mantua Cr.
Forked R.
4090.95
Oyster Cr.
Barnegat Bay
Batsto R.
Mullica R.
Hammonton Cr.
Wading R.
Oswego River
West Br.
Westecunk Cr.
Mill Cr.

Figure 6.--Map showing location of gaging stations

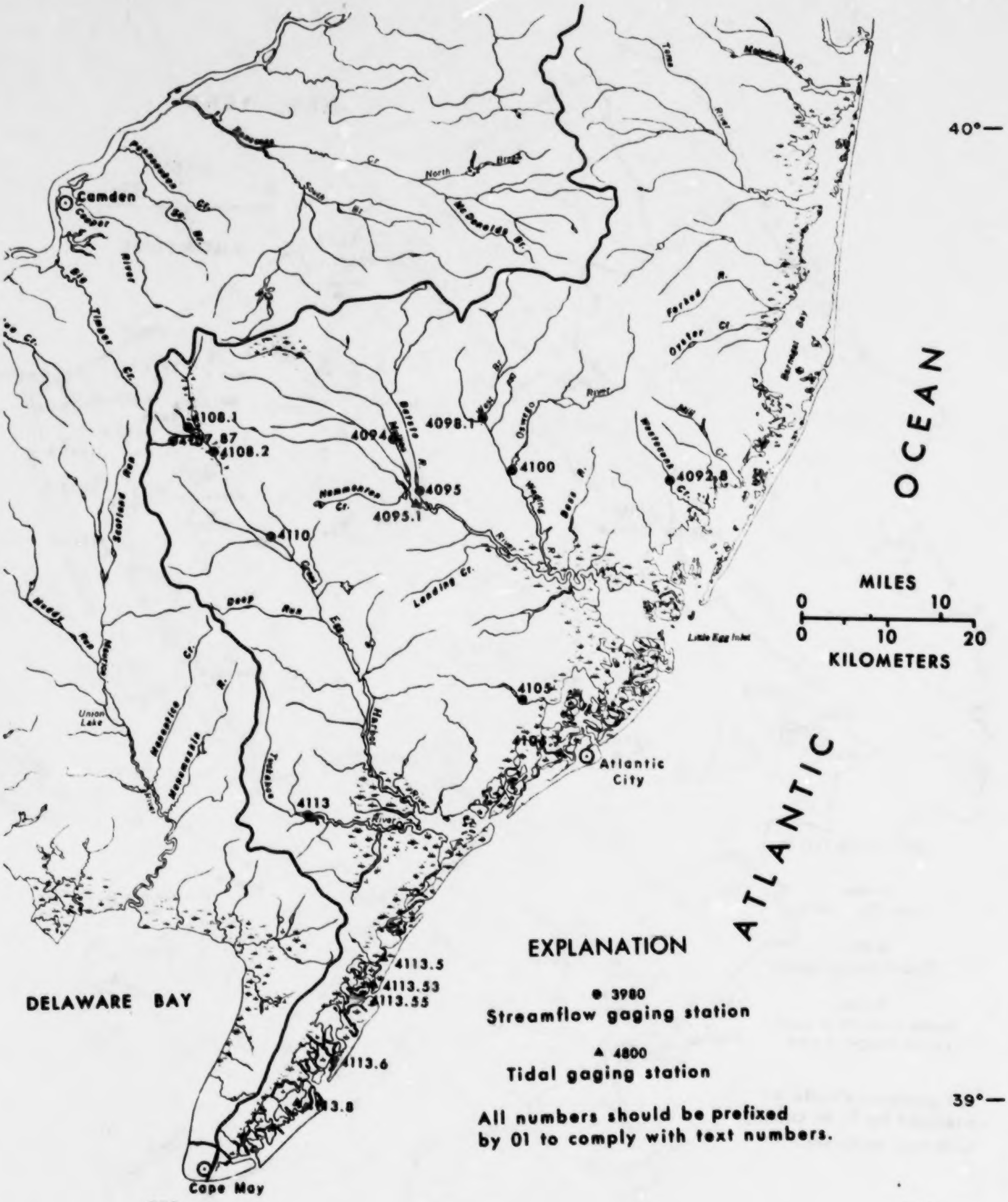
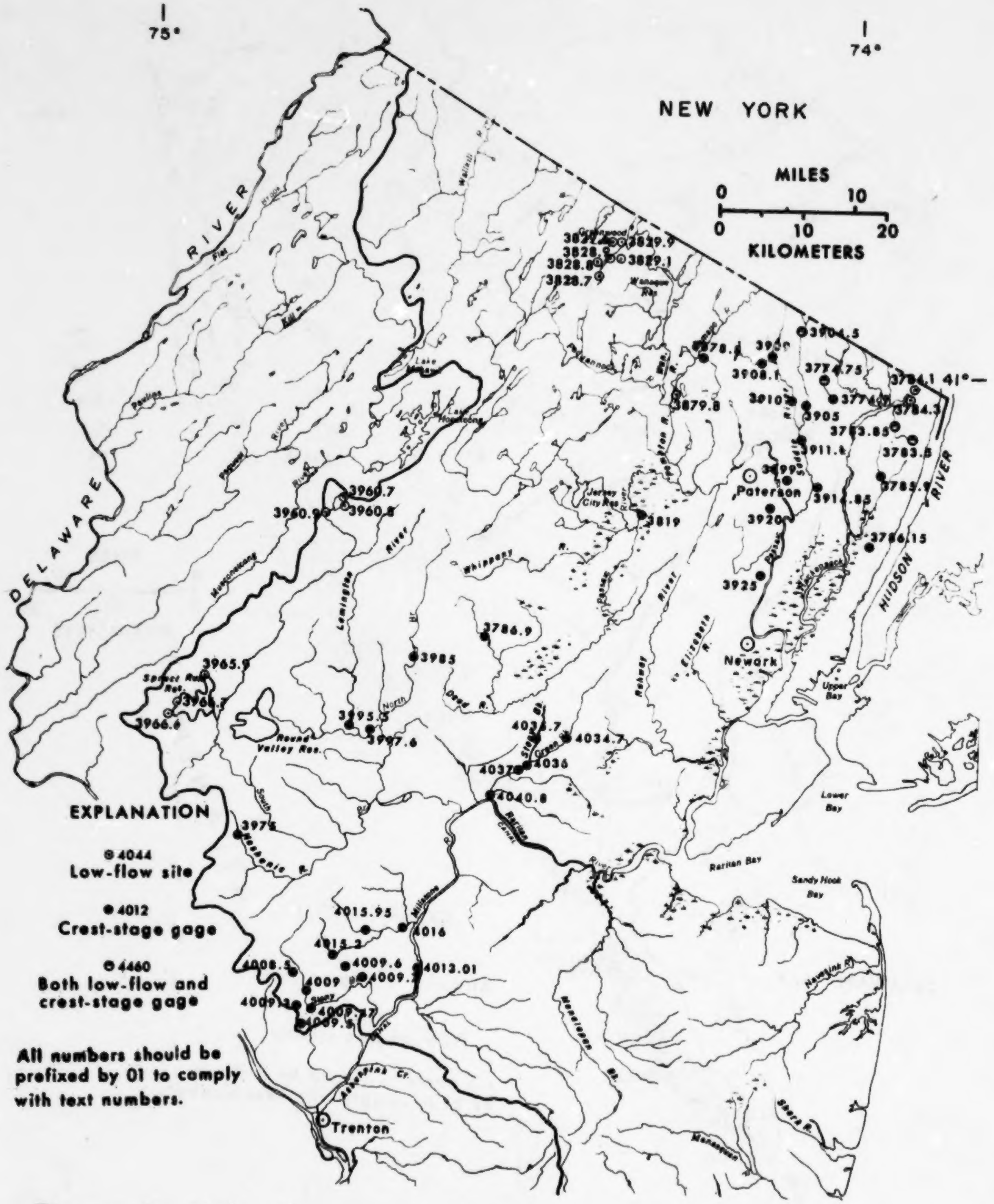

Camden
Cooper River
Pennsauken Cr.
Rancocas
North Br.
South Br.
McDonalds Br.
Big Timber Cr.
Scotland Run
Maurice River
Muddy Run
Union Lake
Manantico Cr.
Manumuskin R.
Batsto R.
West Br.
Oswego River
Wading R.
Bass R.
Nescochague Cr.
Landing Cr.
Deep Run
Great Egg Harbor River
Tuckahoe River
Toms River
Forked R.
Oyster Cr.
Mill Cr.
Westecunk Cr.
Barnegat Bay
Little Egg Inlet
Atlantic City
Cape May
DELAWARE BAY
ATLANTIC OCEAN
4108.1
4107.87
4108.2
4094
4098.1
4100
4095
4095.1
4092.8
4110
4105
4104
4113
4113.5
4113.53
4113.55
4113.6
4113.8
MILES
0
10
0
10
20
KILOMETERS
40°
39°
75°
74°
EXPLANATION
● 3980
Streamflow gaging station
▲ 4800
Tidal gaging station
All numbers should be prefixed by 01 to comply with text numbers.

Figure 7.--Map showing location of gaging stations


75°
74°
41°
NEW YORK
MILES
0
10
0
10
20
KILOMETERS
DELAWARE
RIVER
HUDSON
RIVER
Paterson
Newark
Trenton
Jersey City Res.
Lake Hopatcong
Round Valley Res.
Spruce Run Res.
Wanaque Res.
Upper Bay
Lower Bay
Raritan Bay
Sandy Hook Bay
Whippany R.
Lamington
Musconetcong
Pequest
Paulins
Millstone
Manasquan
Shark R.
Navesink R.
Dead R.
Assunpink Cr.
Green Br.
Elizabeth R.
Rahway River
Passaic
Hackensack
Saddle
3829.9
3829.1
3828.9
3828.8
3828.7
3904.5
3908.1
3910
3905
3774.75
3784.1
3784.3
3783.85
3783.5
3785.9
3911.6
3899
3920
3786.15
3925
3879.8
3819
3960.7
3960.9
3960.8
3786.9
3985
3965.9
3966.6
3995.5
3997.6
4034.7
4036
4037
4040.8
3975
4015.95
4016
4009.6
4013.01
4009
4008.5
4009.3
4009.57
EXPLANATION
4044
Low-flow site
4012
Crest-stage gage
4460
Both low-flow and crest-stage gage

All numbers should be prefixed by 01 to comply with text numbers.

Figure 8.--Map showing location of partial-record stations

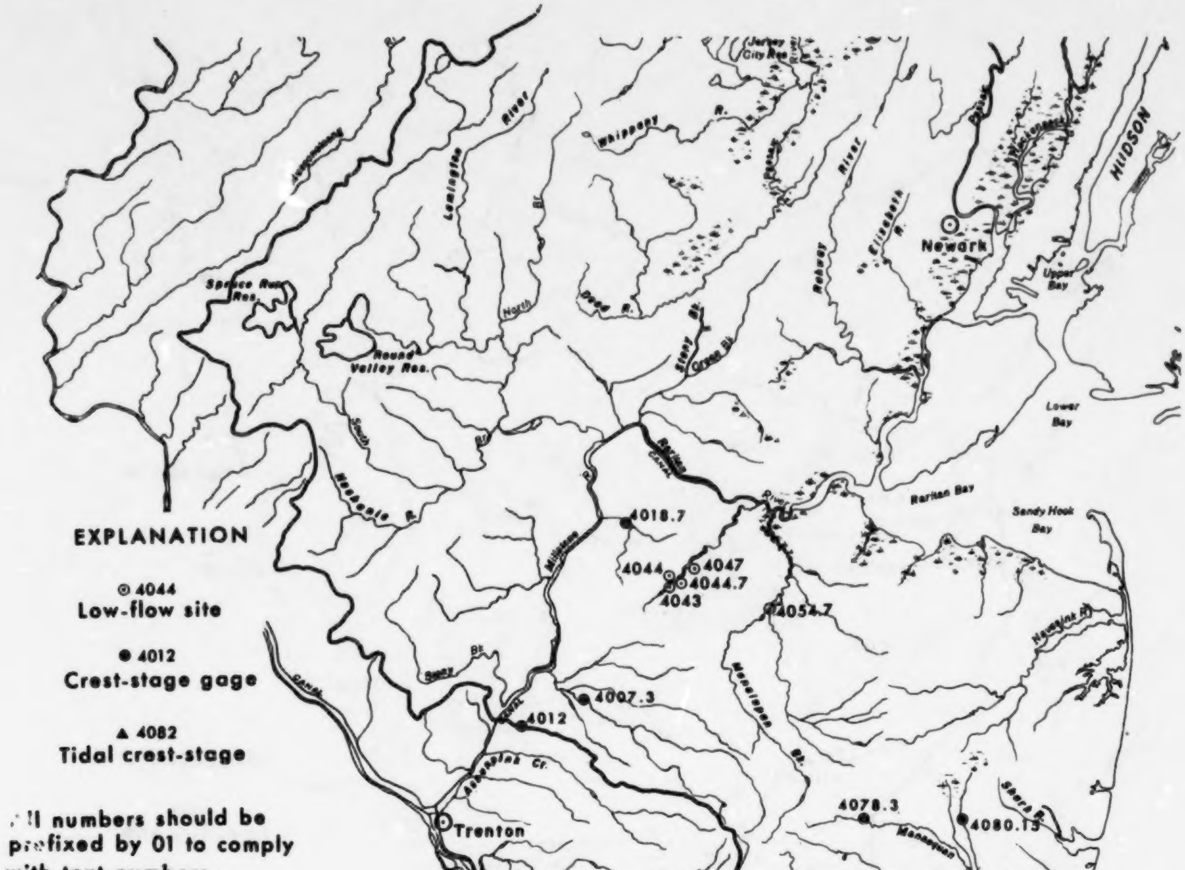

EXPLANATION
◎ 4044
Low-flow site
● 4012
Crest-stage gage
▲ 4082
Tidal crest-stage
All numbers should be prefixed by 01 to comply with text numbers.
MILES
0
10
0
10
20
KILOMETERS
Jersey City Res.
Whippany R.
Passaic
Rahway River
Elizabeth R.
Newark
HUDSON
Upper Bay
Lower Bay
Raritan Bay
Sandy Hook Bay
Spruce Run Res.
Round Valley Res.
Lamington River
North
Br.
Dead R.
Stony Br.
Green Br.
South
Br.
Raritan R.
Raritan Canal
River
Millstone
Bear Br.
Canal
4018.7
4044
4047
4044.7
4043
4054.7
4007.3
4012
Manalapan Br.
Navesink R.
Assunpink Cr.
Trenton
Crosswicks Cr.
4078.3
Manasquan
4080.15
Shark R.
4080.3
Haystack Br.
No. Br.
So. Br.
Metedeconk
4081.6
Toms River
North Br.
Rancocas Cr.
South Br.
McDonalds Br.
4082
Camden
Pennsauken Cr.
So. Br.
Cooper River
Big Timber Cr.
Mantua Cr.
4088
4088.1
Forked R.
Oyster Cr.
Barnegat Bay
Mill
Westecunk Cr.
Batsto
Mullica R.
West Br.
Oswego River
Hammonton Cr.

Figure 9.--Map showing location of partial-record stations

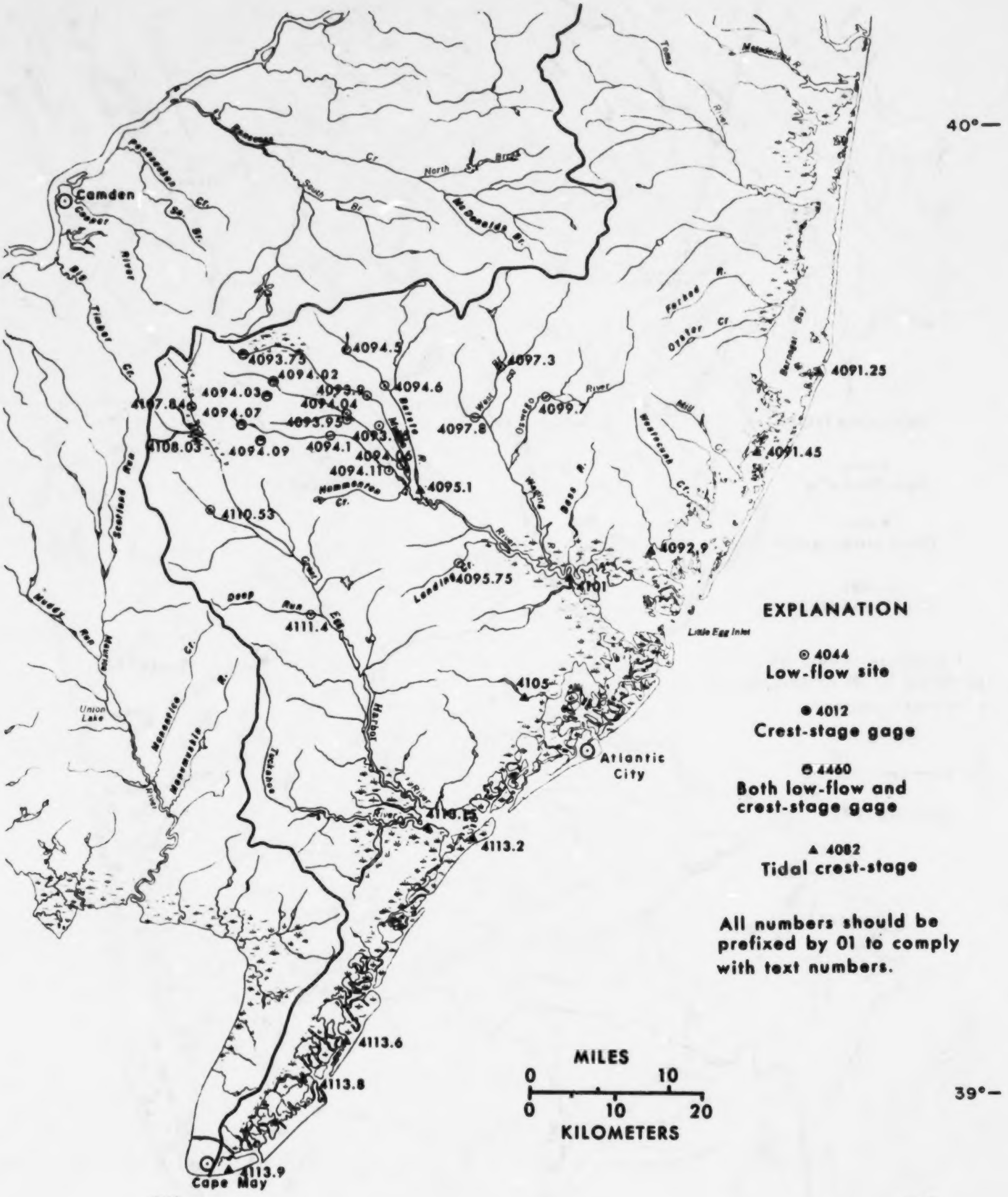

40°—
39°—
75°
74°
Camden
Cooper River
Big Timber Cr.
Pennsauken Cr.
So. Br.
Rancocas Cr.
North Br.
South Br.
McDonalds Br.
Toms River
Metedeconk R.
Forked R.
Oyster Cr.
Barnegat Bay
Mill Cr.
Westecunk Cr.
Wading River
Oswego River
West Br.
Bass R.
Batsto
Mullica River
Nescochague Cr.
Hammonton Cr.
Landing
Deep Run
Egg Harbor River
Great Egg Harbor River
Tuckahoe
Scotland Run
Maurice River
Muddy Run
Union Lake
Manantico Cr.
Manumuskin R.
Little Egg Inlet
Atlantic City
Cape May
4093.73
4094.02
4094.03
4094.07
4094.04
4093.9
4093.95
4094.1
4093.
4094.06
4094.09
4094.11
4094.5
4094.6
4097.3
4097.8
4099.7
4107.84
4108.03
4095.1
4110.53
4095.75
4101
4111.4
4105
4110.
4113.2
4091.25
4091.45
4092.9
4113.6
4113.8
4113.9
EXPLANATION
⊙ 4044
Low-flow site
● 4012
Crest-stage gage
⊙ 4460
Both low-flow and crest-stage gage
▲ 4082
Tidal crest-stage
All numbers should be prefixed by 01 to comply with text numbers.
MILES
0
10
0
10
20
KILOMETERS

Figure 10.--Map showing location of partial-record stations

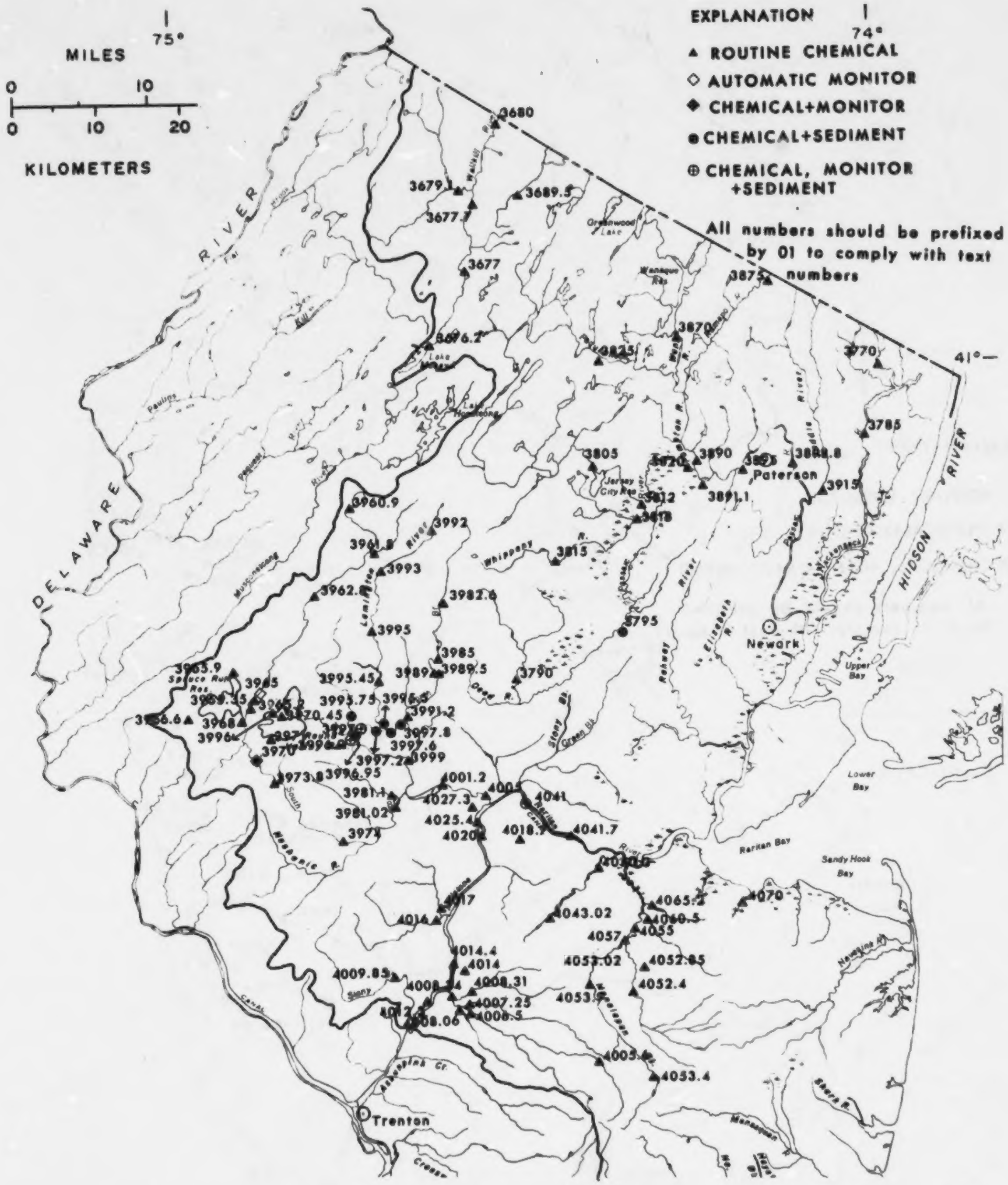

MILES
0
10
0
10
20
KILOMETERS
75°
74°
41°
EXPLANATION
▲ ROUTINE CHEMICAL
◇ AUTOMATIC MONITOR
◆ CHEMICAL+MONITOR
● CHEMICAL+SEDIMENT
⊕ CHEMICAL, MONITOR +SEDIMENT
All numbers should be prefixed by 01 to comply with text numbers
DELAWARE RIVER
HUDSON RIVER
Paulins
Pequest
Musconetcong
Lake Hopatcong
Greenwood Lake
Wanaque Res.
Jersey City Res.
Whippany R.
Lamington
Spruce Run Res.
South
Neshanic R.
Dead R.
Stony Bk.
Green Bk.
Raritan
Canal
River
Rahway
Elizabeth R.
Passaic
Hackensack
Millstone
Stony
Assunpink Cr.
Crosswicks
Manasquan
Navesink R.
Shark R.
Raritan Bay
Sandy Hook Bay
Upper Bay
Lower Bay
Paterson
Newark
Trenton
3680
3679.1
3677.7
3689.5
3677
3676.2
3875
3870
3825
3770
3785
3805
3820
3890
3888.8
3891.1
3915
3812
3818
3815
3795
3790
3960.9
3961.8
3992
3993
3962.8
3982.6
3995
3985
3989
3989.5
3965.9
3995.45
3965
3993.75
3995.5
3991.2
3966.6
3968
3970.45
3997.8
3996
3997.6
3970
3997.2
3999
3973.8
3996.95
3981.1
3981.02
4001.2
4005
4041
4027.3
4025.4
4020
4018.7
4041.7
4065.2
4070
4016
4017
4043.02
4060.5
4057
4055
4014.4
4014
4053.02
4052.85
4009.85
4008.31
4052.4
4007.25
4006.5
4008.06
4053.4

Figure 11.--Map showing location of surface-water quality stations

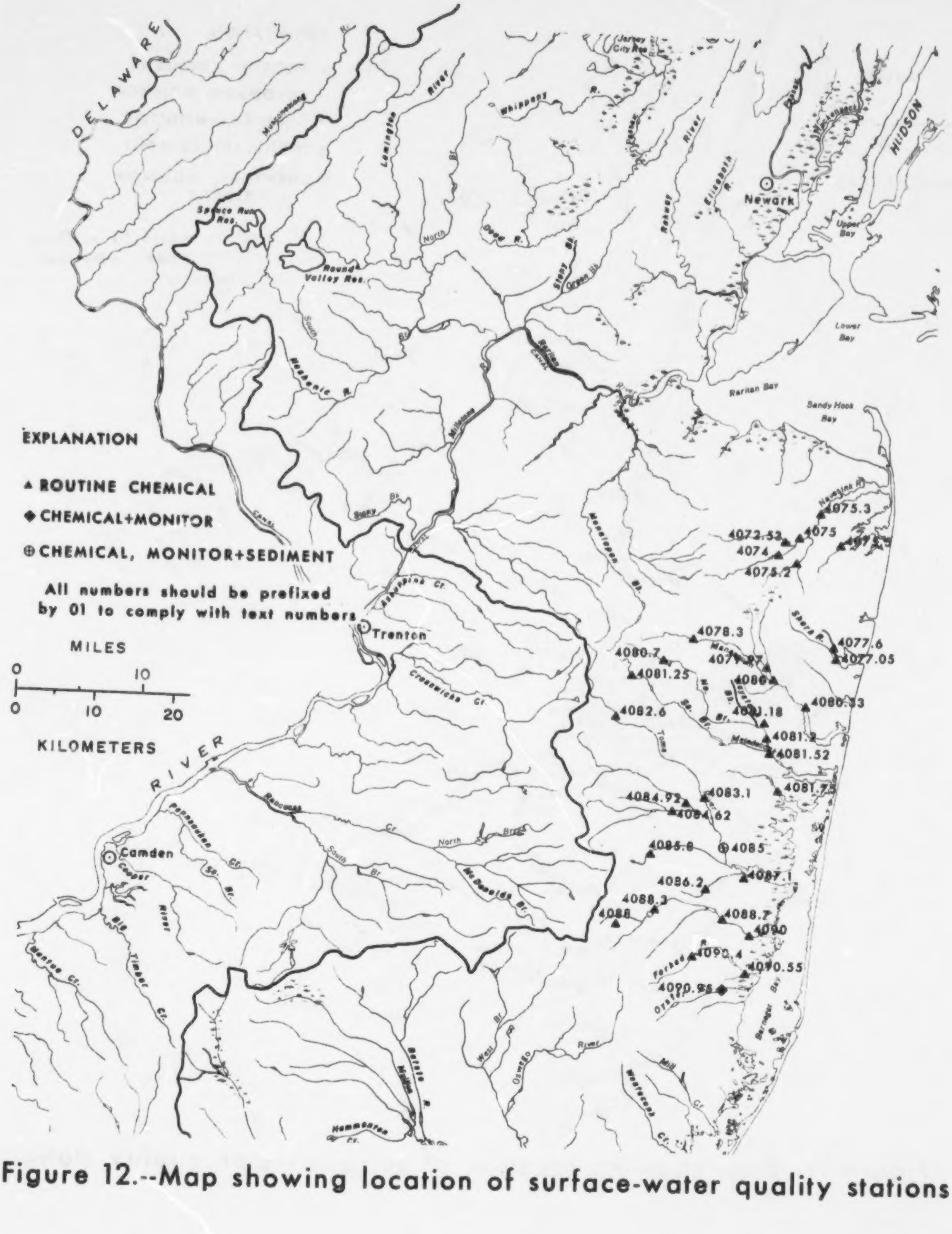

EXPLANATION
▲ ROUTINE CHEMICAL
◆ CHEMICAL+MONITOR
⊕ CHEMICAL, MONITOR+SEDIMENT
All numbers should be prefixed by 01 to comply with text numbers
MILES
0
10
0
10
20
KILOMETERS
DELAWARE
RIVER
Musconetcong
Lamington
River
Whippany
R.
Passaic
River
Rahway
Elizabeth R.
Newark
Hackensack
HUDSON
Upper Bay
Lower Bay
Raritan Bay
Sandy Hook Bay
Spruce Run Res.
Round Valley Res.
North
Br.
South
Neshanic R.
Dead R.
Stony Br.
Green Br.
Raritan
Millstone
Stony Bk.
Canal
Assunpink Cr.
Trenton
Crosswicks Cr.
Manalapan Br.
Navesink R.
Shark R.
Toms
Metedeconk
Rancocas
Cr.
North Br.
South Br.
McDonalds Br.
Pennsauken Cr.
So. Br.
Camden
Cooper River
Big Timber Cr.
Mantua Cr.
Batsto
Mullica R.
Hammonton Cr.
West Br.
Oswego
River
Westecunk Cr.
Mill Cr.
Forked R.
Oyster Cr.
Barnegat Bay
4075.3
4072.52
4075
4074
4075.2
4078.3
4080.7
4081.25
4086
4077.6
4077.05
4082.6
4081.2
4081.52
4081.75
4084.92
4083.1
4084.62
4085
4087.1
4086.2
4088.3
4088
4088.7
4090
4090.4
4090.55

Figure 12.--Map showing location of surface-water quality stations

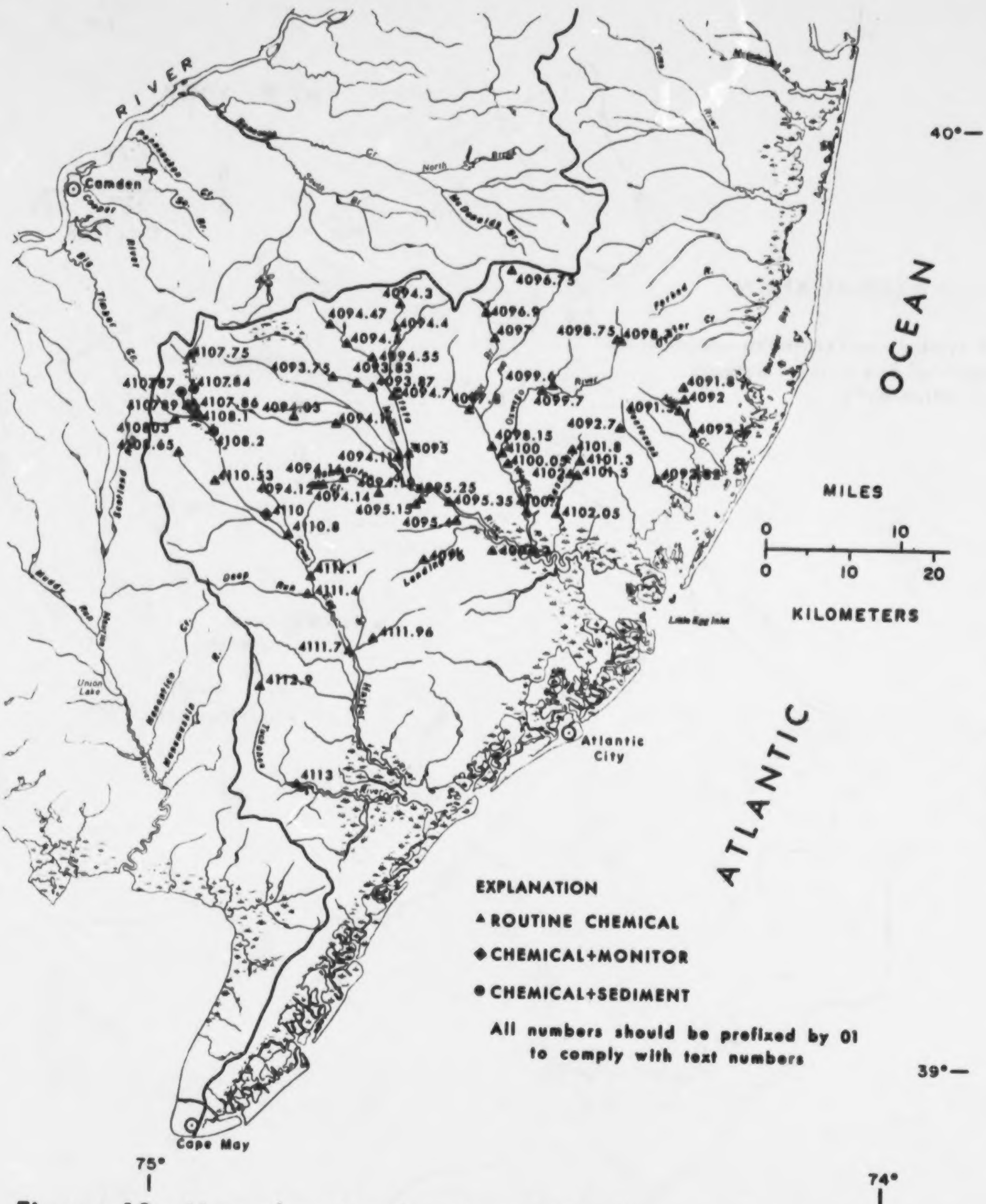

RIVER
Camden
North Br.
South Br.
McDonalds Br.
Forked R.
Union Lake
Little Egg Inlet
Atlantic City
Cape May
OCEAN
ATLANTIC
40°
39°
75°
74°
MILES
0
10
0
10
20
KILOMETERS
4096.75
4094.3
4094.47
4094.4
4096.9
4097
4098.75
4107.75
4094.55
4093.75
4093.83
4093.87
4107.84
4094.7
4099.7
4091.8
4092
4107.86
4094.05
4108.1
4092.7
4098.15
4108.2
4093
4100
4101.8
4100.05
4101.3
4101.5
4110.53
4094.12
4094.14
4095.25
4095.35
4095.15
4102.05
4110
4110.8
4095.4
4111.4
4111.96
4111.7
4113
EXPLANATION
▲ ROUTINE CHEMICAL
◆ CHEMICAL+MONITOR
● CHEMICAL+SEDIMENT
All numbers should be prefixed by 01 to comply with text numbers

Figure 13.--Map showing location of surface-water quality stations

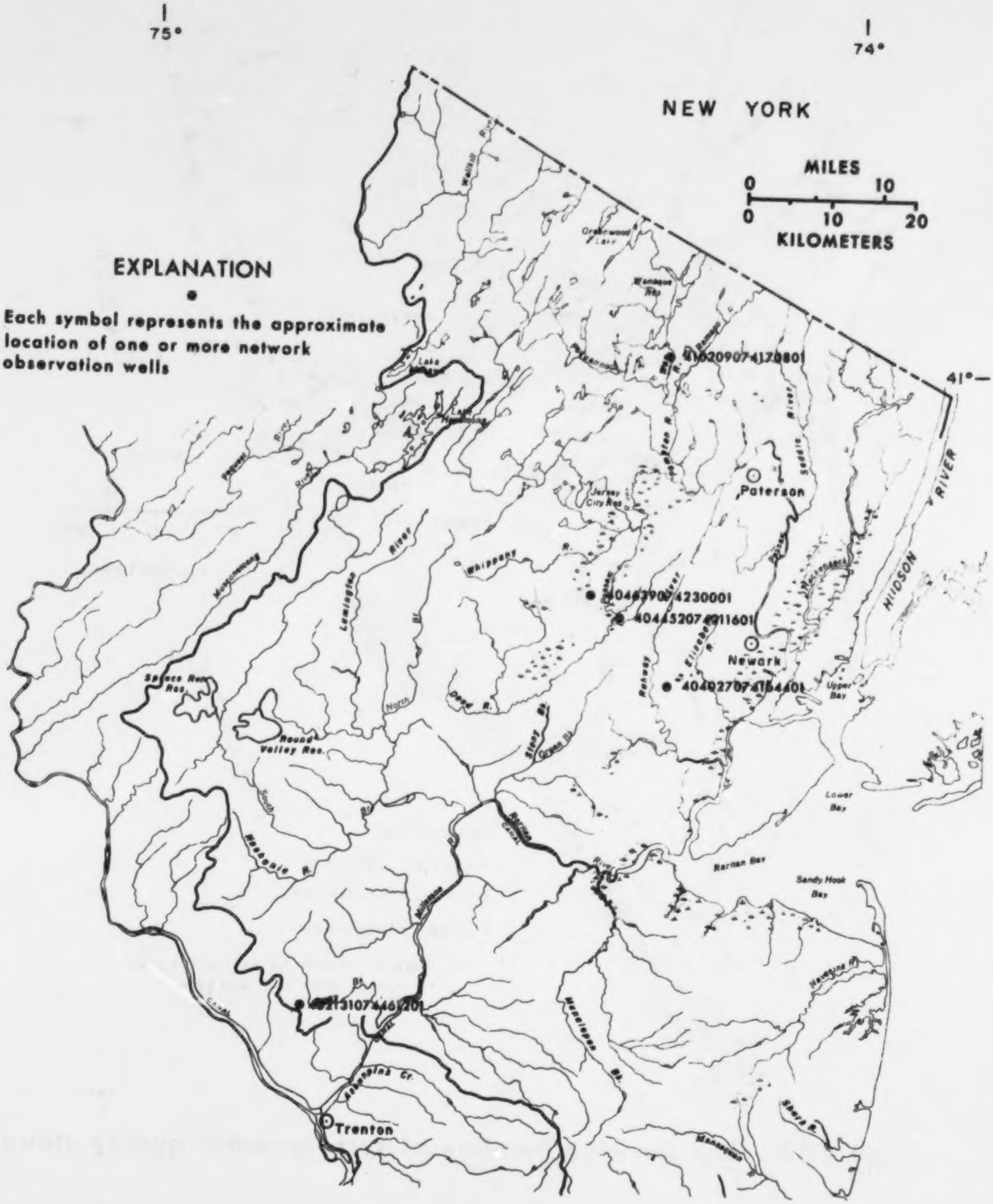

75°
74°
41°
NEW YORK
MILES
0
10
0
10
20
KILOMETERS
EXPLANATION
●
Each symbol represents the approximate location of one or more network observation wells
Greenwood Lake
Wanaque Res.
Lake Hopatcong
410209074170801
404639074230001
404452074211601
404027074164401
402131074461201
Musconetcong
Lamington River
Whippany R.
Jersey City Res.
Paterson
Saddle River
Passaic
HUDSON RIVER
Newark
Rahway
Elizabeth R.
Upper Bay
Lower Bay
Raritan Bay
Sandy Hook Bay
Spruce Run Res.
Round Valley Res.
North
South
Br.
Dead R.
Stony Br.
Green Br.
Neshanic R.
Millstone
Canal
Assunpink Cr.
Trenton
Manalapan Br.
Navesink R.
Shark R.
Manasquan

Figure 14.--Map showing location of ground-water observation wells

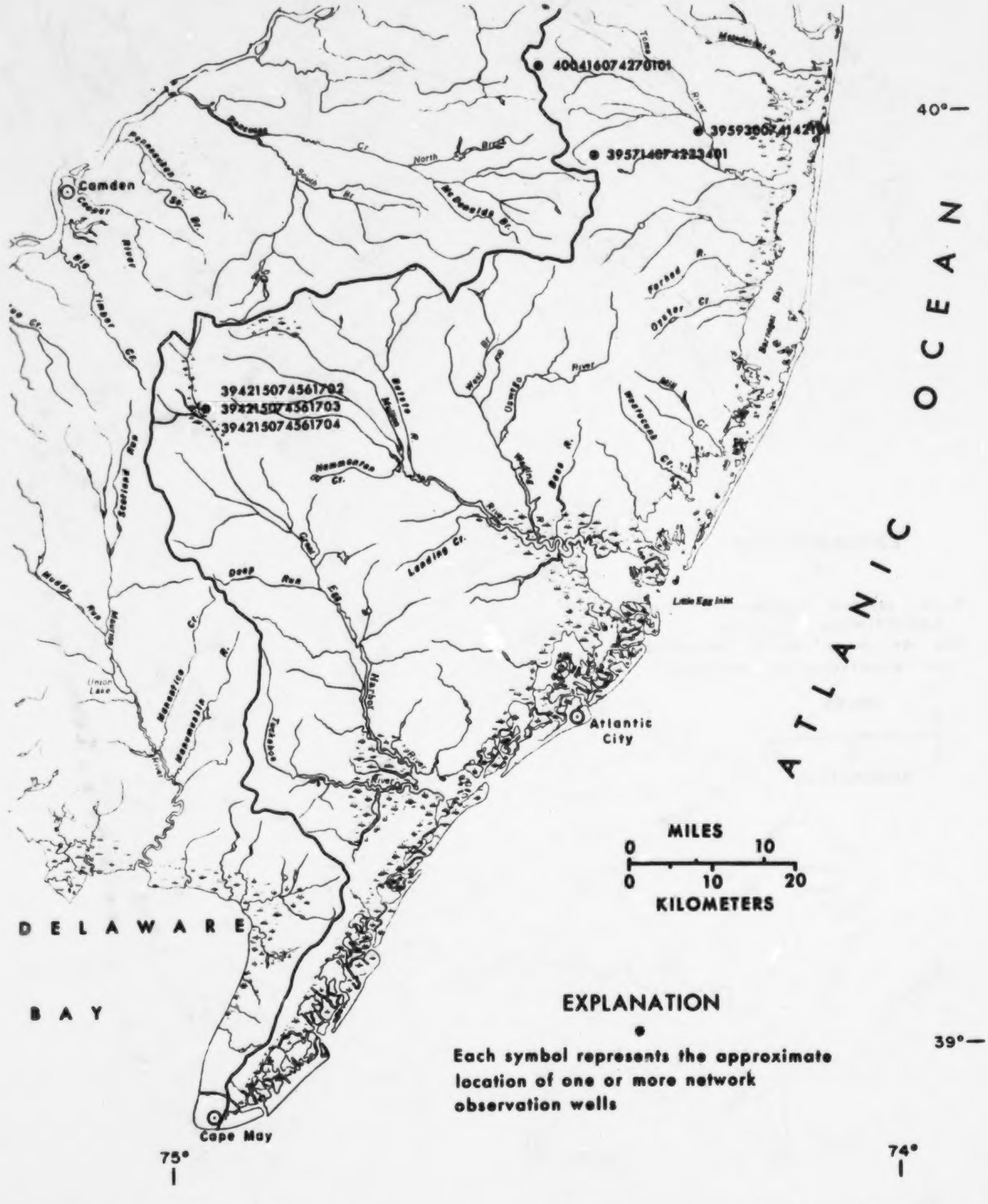
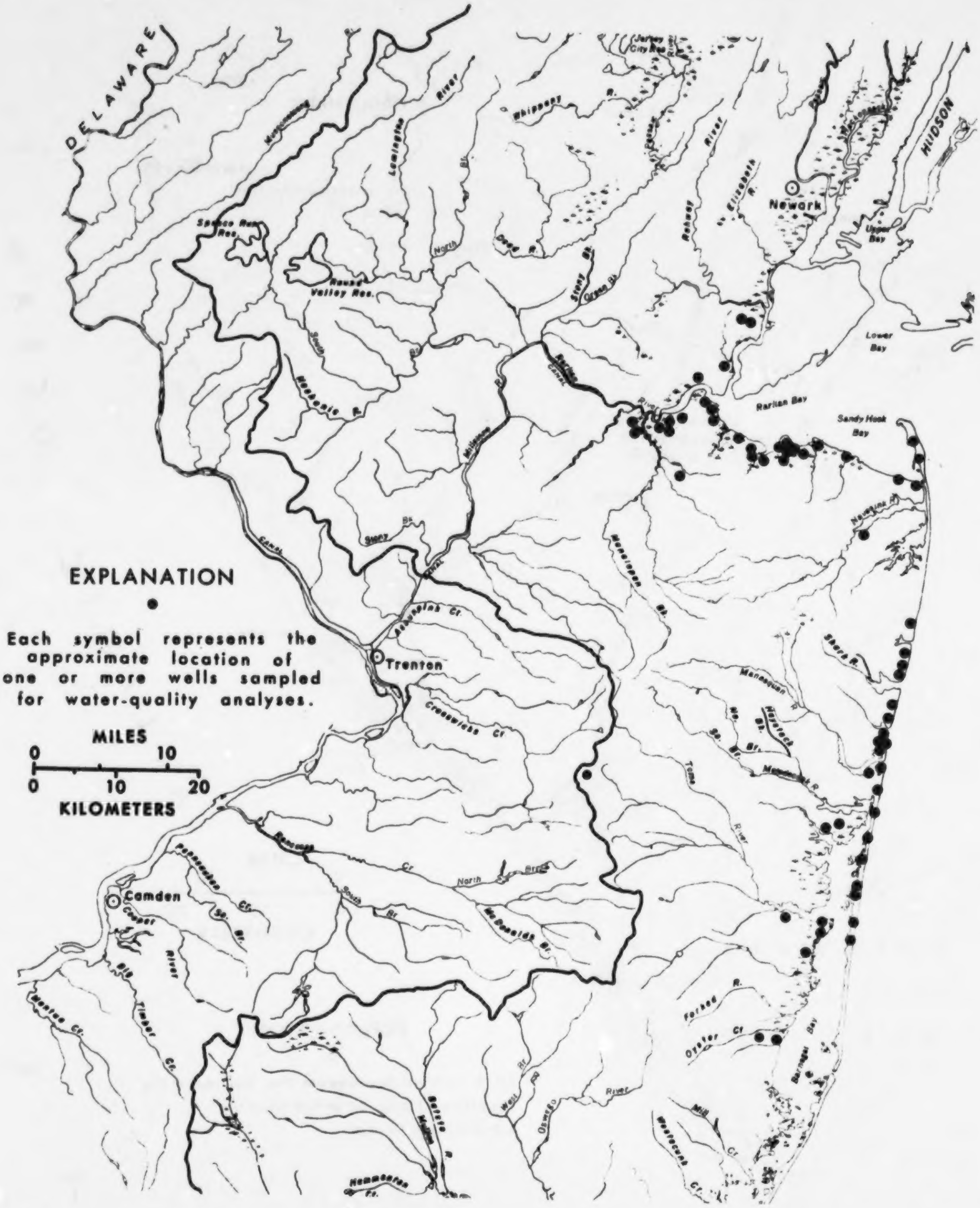

400416074270101
3959300741421
395714074223401
394215074561702
394215074561703
394215074561704
Camden
Cooper River
Big Timber Cr.
Pennsauken Cr.
Rancocas Cr.
North Br.
South Br.
McDonalds Br.
Toms River
Metedeconk R.
Forked R.
Oyster Cr.
Barnegat Bay
Mill Cr.
Westecunk Cr.
West Br.
Oswego River
Wading R.
Bass R.
Batsto R.
Mullica R.
Hammonton Cr.
Landing Cr.
Deep Run
Great Egg Harbor River
Tuckahoe
Scotland Run
Maurice
Muddy Run
Manantico Cr.
Manumuskin R.
Union Lake
Little Egg Inlet
Atlantic City
Cape May
ATLANTIC OCEAN
DELAWARE BAY
MILES
0
10
0
10
20
KILOMETERS
EXPLANATION
●
Each symbol represents the approximate location of one or more network observation wells
40°
39°
75°
74°

Figure 15--Map showing location of ground-water observation wells


DELAWARE
HUDSON
Newark
Upper Bay
Lower Bay
Raritan Bay
Sandy Hook Bay
Trenton
Camden
Spruce Run Res.
Round Valley Res.
Musconetcong
Lamington River
Whippany R.
Passaic
Rahway River
Elizabeth R.
Hackensack
Stony Bk.
Green Bk.
North Br.
South Br.
Neshanic R.
Millstone
Raritan
Stony Bk.
Assunpink Cr.
Crosswicks Cr.
Manasquan
Metedeconk R.
Shark R.
Toms River
Rancocas Cr.
North Branch
South Br.
McDonalds Br.
Pennsauken Cr.
Cooper River
Big Timber Cr.
Mantua Cr.
Forked R.
Oyster Cr.
Barnegat Bay
Westecunk Cr.
Mill Cr.
Wading River
Oswego
Batsto R.
Mullica R.
Hammonton Cr.

EXPLANATION

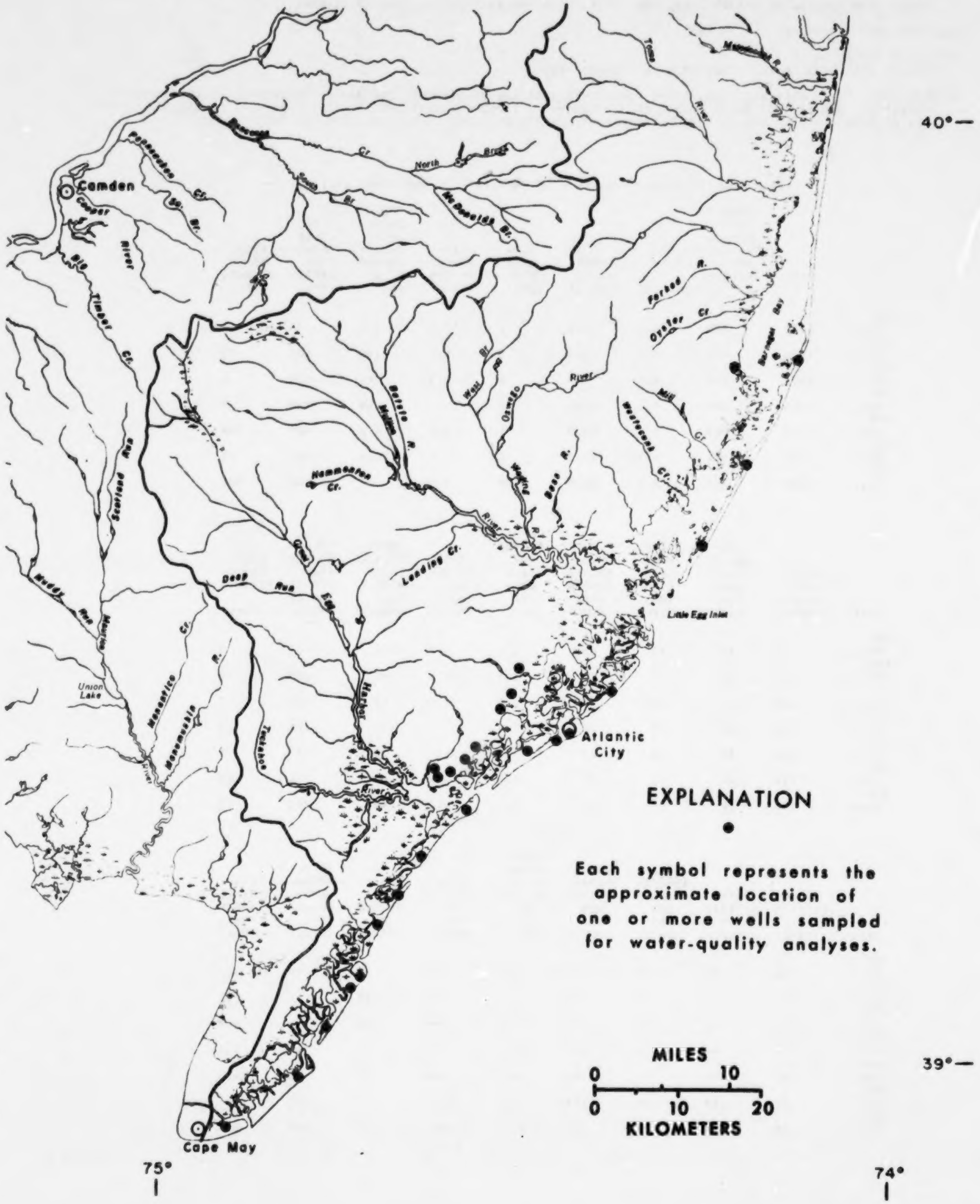
●

Each symbol represents the approximate location of one or more wells sampled for water-quality analyses.

MILES 0 10

0 10 20 KILOMETERS

Figure 16.--Map showing location of ground-water quality stations


40°
39°
75°
74°
Camden
Cooper River
Pennsauken Cr.
Big Timber Cr.
Rancocas Cr.
North Br.
McDonalds Br.
Toms River
Forked R.
Oyster Cr.
Barnegat Bay
Mill Cr.
Westecunk Cr.
Oswego River
Wading R.
Bass R.
Batsto R.
Mullica R.
Hammonton Cr.
Landing Cr.
Deep Run
Egg Harbor River
Tuckahoe River
Little Egg Inlet
Atlantic City
Scotland Run
Muddy Run
Maurice River
Manantico Cr.
Manumuskin R.
Union Lake
Cape May
EXPLANATION
●
Each symbol represents the approximate location of one or more wells sampled for water-quality analyses.
MILES
0
10
0
10
20
KILOMETERS

gure 17.--Map showing location of ground-water quality stations

01367620 WALLKILL RIVER AT OUTFLOW OF MOHAWK LAKE AT SPARTA, NJ

LOCATION.--Lat 41°01'59", long 74°37'36", Sussex County, Hydrologic Unit 02020007, at bridge 200 ft (61 m) downstream from outflow of Mohawk Lake, and 1.2 mi (1.9 km) southwest of Sparta Station.

DRAINAGE AREA.--4.38 mi² (11.34 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
NOV									
09...	1100	363	8.6	5.0	2	12.5	3.0	20	5
FEB									
17...	1100	419	7.4	4.0	2	8.3	1.0	<20	<2
APR									
11...	1030	370	8.2	9.0	4	16.3	--	<20	<2
MAY									
03...	1050	387	8.2	16.5	2	4.7	2.0	<20	5
JUN									
02...	1050	367	9.0	22.5	5	8.4	<.5	<20	350
JUL									
12...	1030	358	8.7	24.0	2	7.8	6.0	<20	31
AUG									
31...	1315	386	8.4	22.5	6	5.9	--	<20	540

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV									
09...	130	30	13	23	1.3	9.1	41	192	9
FEB									
17...	140	34	14	23	1.4	10	45	223	0
APR									
11...	140	36	13	21	1.3	9.6	42	233	7
MAY									
03...	140	35	12	23	1.4	11	44	228	3
JUN									
02...	130	30	13	23	1.3	11	29	132	1
JUL									
12...	110	24	13	23	1.2	8.2	44	201	23
AUG									
31...	120	28	13	23	1.3	8.1	46	202	10

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV									
09...	--	--	--	--	1.5	--	--	--	8.2
FEB									
17...	--	--	--	--	2.0	--	.07	--	7.2
APR									
11...	--	--	--	--	1.4	--	.02	--	3.4
MAY									
03...	--	--	--	--	1.4	--	.04	--	3.5
JUN									
02...	--	--	--	--	4.6	--	.09	--	9.8
JUL									
12...	.01	.00	.38	.72	1.1	1.1	.10	.01	6.1
AUG									
31...	.08	.02	.19	1.2	1.4	1.5	.12	.02	6.4

01367700 WALLKILL RIVER AT FRANKLIN, NJ

LOCATION.--Lat 41°06'43", long 74°35'21", Sussex County, Hydrologic Unit 02020007, at bridge 120 ft (37 m) downstream from dam at outlet of Franklin Pond, and 0.8 mi (1.3 km) upstream from Wildcat Brook.

DRAINAGE AREA.--29.4 mi² (76.1 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1959-63, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
NOV 10...	1200	274	7.6	4.5	1	12.8	3.0	80	8
FEB 17...	1150	410	7.5	1.0	3	11.3	2.0	40	130
APR 11...	1145	243	7.9	8.5	2	16.6	--	<20	5
MAY 03...	1210	302	8.6	14.0	2	9.3	2.0	<20	5
JUN 02...	1215	379	8.6	22.0	2	9.6	3.0	80	27
JUL 12...	1130	436	8.5	23.0	1	8.7	2.0	<20	8
AUG 31...	1200	445	8.6	23.0	1	9.5	--	<20	920

DATE	HARDNESS (CA+MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV 10...	110	26	11	15	1.3	16	27	146	7
FEB 17...	130	32	13	24	2.3	20	48	218	8
APR 11...	110	27	9.3	14	1.1	16	28	168	6
MAY 03...	110	26	9.9	15	1.4	15	29	176	5
JUN 02...	150	36	15	18	2.1	17	36	236	22
JUL 12...	160	34	17	23	2.2	16	43	240	13
AUG 31...	150	29	18	25	2.9	26	49	258	3

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 10...	--	--	--	--	1.4	--	--	--	4.2
FEB 17...	--	--	--	--	1.7	--	.24	--	8.3
APR 11...	--	--	--	--	1.0	--	.03	--	1.8
MAY 03...	--	--	--	--	1.1	--	.00	--	4.5
JUN 02...	--	--	--	--	1.4	--	.02	--	5.1
JUL 12...	.47	.04	.18	.16	.34	.85	.03	.00	5.9
AUG 31...	.59	.01	.06	.53	.59	1.2	.01	.00	6.1

01367770 WALLKILL RIVER NEAR SUSSEX, NJ

LOCATION.--Lat 41°11'38", long 74°34'32", Sussex County, Hydrologic Unit 02020007, at bridge 1.7 mi (2.7 km) southwest of Independence Corner, and 2.1 mi (3.4 km) northwest of McAfee.

DRAINAGE AREA.--60.8 mi² (157.5 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: September 1977.
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
OCT 21...	1300	332	8.0	10.0	2	9.8	3.0	2400	>2400
DEC 02...	1330	443	7.5	1.5	2	12.5	3.0	50	23
FEB 28...	1330	263	7.5	4.0	5	11.8	--	170	1600
MAR 22...	1335	247	7.7	5.0	8	12.9	<.5	50	79
APR 19...	1330	402	8.3	14.0	3	10.8	3.0	30	11
MAY 12...	1340	329	7.8	14.0	2	10.5	1.0	330	4
JUN 15...	1320	436	8.1	18.5	1	4.6	<.5	790	280
JUL 20...	1300	529	8.2	24.0	1	4.6	1.0	700	540
AUG 10...	1300	500	--	20.0	0	4.4	1.0	3500	350

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT 21...	140	32	14	17	3.1	19	27	193	25
DEC 02...	190	46	19	15	1.8	24	30	244	12
FEB 28...	110	25	11	12	1.9	17	21	160	9
MAR 22...	88	24	6.8	11	1.8	22	22	144	3
APR 19...	130	38	9.0	14	1.6	22	20	208	2
MAY 12...	140	35	13	13	1.1	17	23	187	109
JUN 15...	200	46	20	15	1.6	20	28	261	13
JUL 20...	240	52	26	17	2.2	26	32	289	2
AUG 10...	130	48	2.4	19	3.0	28	35	333	12

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 21...	--	--	--	--	1.4	--	--	--	--
DEC 02...	--	--	--	--	1.4	--	--	--	5.1
FEB 28...	--	--	--	--	1.7	--	.06	--	3.0
MAR 22...	--	--	--	--	1.4	--	.06	--	2.6
APR 19...	--	--	--	--	1.1	--	.03	--	6.9
MAY 12...	--	--	--	--	1.3	--	.02	--	5.4
JUN 15...	--	--	--	--	1.1	--	.03	--	7.1
JUL 20...	.79	.02	.09	.40	.49	1.3	.09	.05	5.8
AUG 10...	.89	.01	.09	.72	.81	1.7	.08	.06	5.1

01367910 PAPAKATING CREEK AT SUSSEX, NJ

LOCATION.--Lat 41°12'02", long 74°35'59", Sussex County, Hydrologic Unit 02020007, at bridge on State Route 23, 2.6 mi (4.2 km) southwest of Independence Corner, and 3.4 mi (5.6 km) northwest of McAfee.

DRAINAGE AREA.--59.4 mi² (153.8 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: September 1977.
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
OCT									
21...	1200	177	8.1	10.0	10	10.2	5.0	5400	>2400
DEC									
02...	1230	265	7.5	1.5	3	14.0	2.0	20	13
FEB									
28...	1230	154	6.8	5.0	20	18.2	--	2400	>2400
MAR									
22...	1200	193	7.3	6.0	10	12.9	<.5	<20	920
APR									
19...	1215	232	8.5	15.0	4	9.3	2.0	80	4
MAY									
12...	1245	219	7.6	14.0	2	9.0	1.0	490	33
JUN									
15...	1230	277	7.8	19.0	1	5.7	2.0	310	350
JUL									
20...	1145	339	7.3	25.0	1	3.4	1.0	490	280
AUG									
10...	1150	315	--	22.0	10	4.3	4.0	80	220

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT									
21...	58	18	3.2	8.5	4.2	22	14	99	58
DEC									
02...	93	30	4.4	11	1.8	29	21	154	10
FEB									
28...	44	14	2.1	8.6	2.5	18	16	97	43
MAR									
22...	60	19	3.0	11	1.9	21	20	121	16
APR									
19...	85	28	3.7	11	1.8	24	18	114	4
MAY									
12...	93	30	4.5	10	1.4	22	18	121	1
JUN									
15...	100	34	4.6	12	2.0	27	21	179	41
JUL									
20...	130	41	5.7	13	2.6	29	24	176	1
AUG									
10...	130	41	5.5	14	3.3	35	24	201	25

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT									
21...	--	--	--	--	1.4	--	--	--	7.8
DEC									
02...	--	--	--	--	1.4	--	--	--	4.2
FEB									
28...	--	--	--	--	1.5	--	.08	--	5.2
MAR									
22...	--	--	--	--	1.4	--	.05	--	1.8
APR									
19...	--	--	--	--	1.3	--	.05	--	7.2
MAY									
12...	--	--	--	--	1.3	--	.06	--	6.5
JUN									
15...	--	--	--	--	1.4	--	.06	--	5.6
JUL									
20...	.66	.06	.72	.58	1.3	2.0	.28	.19	6.2
AUG									
10...	.51	.02	.37	1.8	2.2	2.7	.63	.41	5.0

01368000 WALLKILL RIVER NEAR UNIONVILLE, NY

LOCATION.--Lat 41°15'36", long 74°32'56", Sussex County, Hydrologic Unit 02020007, on right bank on downstream side of bridge on the Bassetts Bridge Road, 0.6 mi (1.0 km) upstream from small tributary, 2.0 mi (3.2 km) south of the New York-New Jersey State line, and 3.0 mi (4.8 km) south of Unionville. Water-quality sampling site at same location.

DRAINAGE AREA.--140 mi² (363 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: September 1937 to current year.
CHEMICAL ANALYSES: Water years 1963 to current year.
SEDIMENT RECORDS: Water year 1971.

REVISED DISCHARGE RECORD.--WRD-NY 1966: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 390 ft (119 m), from topographic map. Prior to Nov. 16, 1949, nonrecording gage at same site and datum.

REMARKS.--Discharge records good except those for winter months and those above 600 ft³/s (17 m³/s), which are poor. Water diverted from Morris Lake, upstream from station, by the Newton Water and Sewer Authority fo municipal use. After use, the water is released into Paulins Kill (Delaware River Basin). Diversion records available from the Delaware River Basin Commission.

COOPERATION.--Field data (dissolved oxygen, water temperature, pH) and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources after October 1975. Analyses of fecal coliform and fecal streptococci by the MPN method and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--40 years, 215 ft³/s (6.089 m³/s), 20.86 in/yr (530 mm/yr).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (34.0 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 26	1745	1680	47.6	8.67	2.643
Mar. 15	1500	1490	42.2	8.32	2.536
Mar. 24	0230	*1790	50.7	8.87	2.704

Minimum discharge, 11 ft³/s (0.31 m³/s) Sept. 12, gage height, 2.85 ft (0.869 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,880 ft³/s (195 m³/s) Aug. 19, 1955, gage height, 13.35 ft (4.069 m); minimum daily, 4.2 ft³/s (0.12 m³/s) Aug. 8-10, 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	340	91	60	50	740	314	218	59	25	13	15
2	91	256	88	60	49	456	286	200	74	23	13	16
3	134	211	71	60	49	326	566	191	64	21	14	30
4	191	198	67	58	49	368	671	172	51	20	31	23
5	126	201	64	58	48	789	691	236	46	19	28	16
6	98	258	61	56	48	1000	858	268	45	20	21	14
7	85	222	171	56	48	820	920	304	60	22	33	16
8	80	186	518	56	47	600	760	314	62	34	35	17
9	208	161	385	54	47	418	560	291	60	37	25	18
10	464	151	288	54	47	354	445	298	196	26	21	14
11	335	148	236	54	47	324	383	265	186	21	24	12
12	209	139	199	54	47	298	342	219	107	28	23	13
13	163	128	177	54	50	371	308	190	77	49	20	14
14	153	120	140	54	70	883	280	168	63	33	21	12
15	139	122	130	52	150	1440	247	151	61	25	29	12
16	120	117	120	52	100	1300	225	141	57	21	25	13
17	115	112	110	52	80	920	205	134	47	26	26	33
18	105	113	110	52	70	640	193	123	44	26	74	41
19	95	108	100	52	68	489	184	116	45	20	43	32
20	100	106	94	52	66	459	174	112	47	17	27	43
21	376	100	88	52	64	418	164	104	42	17	22	71
22	434	96	84	52	62	590	154	97	47	16	22	53
23	312	90	80	52	70	1400	153	88	38	14	28	42
24	226	83	76	52	150	1700	285	81	31	13	25	48
25	256	80	74	52	961	1400	421	79	29	13	22	280
26	349	77	70	52	1610	1100	375	75	35	17	20	441
27	344	81	68	50	1400	840	425	67	37	16	18	385
28	267	86	66	50	1000	640	403	60	29	14	16	245
29	224	108	64	50	---	521	305	55	29	13	16	148
30	199	135	64	50	---	450	248	55	27	12	16	98
31	258	---	62	50	---	380	---	59	---	13	14	---
TOTAL	6333	4333	4016	1662	6547	22434	11545	4931	1795	671	765	2215
MEAN	204	144	130	53.6	234	724	385	159	59.8	21.6	24.7	73.8
MAX	464	340	518	60	1610	1700	920	314	196	49	74	441
MIN	77	77	61	50	47	298	153	55	27	12	13	12
CFSM	1.46	1.03	.93	.38	1.67	5.17	2.75	1.14	.43	.15	.18	.53
IN.	1.68	1.15	1.07	.44	1.74	5.96	3.07	1.31	.48	.18	.20	.59

CAL YR 1976 TOTAL 74894 MEAN 205 MAX 2220 MIN 28 CFSM 1.46 IN 19.90
WTR YR 1977 TOTAL 67247 MEAN 184 MAX 1700 MIN 12 CFSM 1.31 IN 17.87

01368000 WALLKILL RIVER NEAR UNIONVILLE, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
OCT 21...	1100	398	280	6.7	10.0	10	9.4	4.0	5400	>2400
DEC 02...	1130	88	342	8.5	1.0	4	13.2	3.0	<20	49
FEB 28...	1130	1120	203	8.2	5.0	10	11.2	--	220	540
MAR 22...	1055	444	328	8.0	5.0	2	12.7	<.5	<20	33
APR 19...	1130	184	332	7.9	14.0	7	7.3	2.0	20	49
MAY 12...	1130	220	304	7.7	13.0	8	7.0	1.0	2400	33
JUN 15...	1130	63	376	7.9	19.0	1	3.7	<.5	130	240
JUL 20...	1050	17	424	8.2	28.0	1	5.1	1.0	20	79
AUG 10...	1100	20	412	--	24.0	2	8.2	6.0	110	23

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT 21...	94	26	7.0	13	3.4	--	31	21	--	143
DEC 02...	88	23	7.4	8.0	1.0	--	18	18	--	130
FEB 28...	65	17	5.5	11	2.7	--	18	20	--	127
MAR 22...	130	31	13	14	1.5	--	19	26	--	176
APR 19...	110	38	4.3	13	1.7	--	23	25	--	169
MAY 12...	120	32	10	12	1.3	.0	19	22	4.5	166
JUN 15...	[illegible]	41	14	14	1.8	--	22	26	--	246
JUL 20...	[illegible]	46	18	15	2.3	--	27	29	--	261
AUG 10...	[illegible]	42	17	17	3.4	--	27	32	--	243

DATE	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 21...	32	--	--	--	--	1.4	--	--	--	6.9
DEC 02...	12	--	--	--	--	1.1	--	--	--	3.6
FEB 28...	24	--	--	--	--	1.7	--	.12	--	5.3
MAR 22...	20	--	--	--	--	1.4	--	.04	--	.9
APR 19...	14	--	--	--	--	1.1	--	.04	--	6.3
MAY 12...	5	--	--	--	--	1.4	--	.06	--	4.9
JUN 15...	13	--	--	--	--	1.4	--	.02	--	6.2
JUL 20...	14	.30	.02	.15	.63	.78	1.1	.13	.04	6.2
AUG 10...	26	.34	.01	.16	1.5	1.7	2.1	.17	.07	5.2

01368000 WALLKILL RIVER NEAR UNIONVILLE, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY 12...	1130	50	0	0	0	0	0	55

DATE	DISSOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY 12...	120	6	90	.2	11	0	60	0

01368950 BLACK CREEK NEAR VERNON, NJ

LOCATION.--Lat 41°13'21", long 74°28'33", Sussex County, Hydrologic Unit 02020007, at bridge 0.7 mi (1.1 km) northwest of Maple Grange, and 1.7 mi (2.7 km) northeast of Vernon.

DRAINAGE AREA.--17.3 mi² (44.8 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: September 1977.
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
NOV 10...	1330	511	7.7	2.0	3	10.8	3.0	170	79
FEB 17...	1320	587	7.5	1.0	5	8.2	3.0	20	240
APR 11...	1330	372	7.7	11.0	2	15.4	--	<20	5
MAY 03...	1330	516	7.8	16.0	2	8.5	2.0	80	5
JUN 02...	1320	580	8.2	21.0	4	9.2	1.0	80	920
JUL 12...	1300	563	8.0	21.0	1	3.8	2.0	>24000	>2400
AUG 31...	1100	662	7.7	20.0	4	4.9	--	700	920

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV 10...	220	50	23	22	1.6	20	40	265	14
FEB 17...	230	54	23	24	3.4	24	53	322	7
APR 11...	190	46	19	15	1.2	17	32	265	7
MAY 03...	220	53	21	20	1.1	16	40	290	4
JUN 02...	250	59	24	30	1.5	19	59	358	6
JUL 12...	230	52	24	29	2.4	18	57	337	30
AUG 31...	240	52	26	37	2.6	23	70	372	12

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 10...	--	--	--	--	1.4	--	--	--	3.8
FEB 17...	--	--	--	--	2.0	--	.10	--	8.6
APR 11...	--	--	--	--	1.1	--	.04	--	2.2
MAY 03...	--	--	--	--	1.3	--	.03	--	3.7
JUN 02...	--	--	--	--	1.4	--	.02	--	5.1
JUL 12...	.94	.06	.21	.41	.62	1.6	.14	.05	8.5
AUG 31...	.76	.06	.17	.30	.47	1.3	.19	.08	7.1

01376800 HACKENSACK RIVER AT WEST NYACK, NY

LOCATION.--Lat 41°05'44", long 73°57'52", Rockland County, NY, Hydrologic Unit 02030103, on right bank 20 ft (6 m) downstream from Penn Central Transportation Company railroad bridge at West Nyack, 1,000 ft (305 m) upstream from State Highway 59, and 1.0 mi (1.6 km) downstream from De Forest Lake.

DRAINAGE AREA.--29.4 mi² (76.1 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: December 1958 to current year.

GAGE.--Water-stage recorder and stop-log control. Datum of gage is 53.50 ft (16.307 m) NGVD (levels by Hackensack Water Co.).

REMARKS.--Discharge records good except those for winter periods, which are poor. Flow regulated by De Forest Lake (see Hackensack River Basin, reservoirs in). Diversion from gaging station pool for municipal supply for village of Nyack (see Hackensack River Basin, reservoirs in). Discharge given for this station represents the flow of Hackensack River downstream from this diversion.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 651 ft³/s (18.4 m³/s) Mar. 23, gage height, 7.52 ft (2.292 m); minimum, 7.4 ft³/s (0.21 m³/s) June 22, 24, July 10, 15, 16; minimum gage height, 2.60 ft (0.792 m), June 22, 24, July 10, 15, 16, Aug. 11, 12.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,550 ft³/s (43.9 m³/s) Feb. 3, 1973, (gage height, 9.38 ft or 2.859 m, from floodmark), from rating curve extended above 840 ft³/s (23.8 m³/s); minimum daily, 2.6 ft³/s (0.074 m³/s) June 12, 1965, Sept. 25, 26, 30, 1966; minimum gage height, 1.70 ft (0.518 m) Oct. 22, 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	90	20	16	17	98	57	26	27	9.9	13	14
2	22	59	22	16	16	50	62	22	17	11	12	14
3	31	33	22	16	16	34	82	23	23	11	14	14
4	20	32	20	16	16	99	134	18	21	11	13	14
5	17	33	20	16	16	416	330	40	17	11	12	14
6	18	32	20	16	16	232	201	54	19	11	11	22
7	17	28	46	16	16	75	119	73	21	11	12	40
8	17	29	92	17	16	57	102	53	19	9.9	11	41
9	64	21	56	17	16	49	84	79	41	9.9	11	42
10	264	19	35	17	16	48	67	79	49	11	14	46
11	53	18	32	17	17	46	60	41	23	13	11	44
12	19	16	30	17	18	43	56	33	15	15	18	44
13	17	15	28	17	20	192	52	31	14	11	47	45
14	17	15	20	17	18	394	52	26	13	11	49	47
15	15	17	17	17	16	191	42	19	14	9.4	51	47
16	16	17	16	16	14	87	38	15	13	9.9	49	51
17	15	14	16	16	14	59	34	17	14	13	56	57
18	19	15	16	15	16	63	30	16	15	12	47	50
19	16	13	17	15	17	125	26	16	15	11	46	49
20	21	14	20	15	17	110	25	16	14	14	45	52
21	133	16	25	16	17	58	23	15	13	12	44	50
22	96	16	21	15	17	239	22	15	11	12	47	46
23	32	16	17	15	18	512	24	16	12	12	44	45
24	29	17	21	16	39	330	36	16	11	12	31	58
25	40	17	16	16	416	133	103	17	15	13	13	99
26	119	17	20	18	341	75	95	17	19	12	14	79
27	68	19	19	19	198	55	62	16	13	12	13	54
28	27	20	18	18	147	70	42	16	11	12	13	51
29	25	20	17	16	---	106	38	18	11	12	12	55
30	23	17	16	15	---	69	32	17	11	12	12	54
31	49	---	17	17	---	60	---	17	---	13	13	---
TOTAL	1339	705	772	506	1521	4175	2130	877	531	360.0	798	1338
MEAN	43.2	23.5	24.9	16.3	54.3	135	71.0	28.3	17.7	11.6	25.7	44.6
MAX	264	90	92	19	416	512	330	79	49	15	56	99
MIN	15	13	16	15	14	34	22	15	11	9.4	11	14

CAL YR 1976 TOTAL 16248.0 MEAN 44.4 MAX 494 MIN 13
WTR YR 1977 TOTAL 15052.0 MEAN 41.2 MAX 512 MIN 9.4

01377000 HACKENSACK RIVER AT RIVERVALE, NJ

LOCATION.--Lat 40°59'55", long 73°59'27", Bergen County, Hydrologic Unit 02030103, on upstream right bank at bridge on Westwood Avenue in Rivervale, 1.5 mi (2.4 km) upstream from Pascack Brook, 4.6 mi (7.4 km) upstream from Oradell Dam, and 27.2 mi (43.8 km) upstream from mouth.

DRAINAGE AREA.--58.0 mi² (150.2 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1941 to current year.
CHEMICAL ANALYSES: Water years 1962, 1964 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 22.51 ft (6.861 m) NGVD.

REMARKS.--Discharge records excellent. Flow regulated by De Forest Lake and Lake Tappan (see Hackensack River Basin, reservoirs in). Diversions from De Forest Lake and West Nyack, NY, for municipal water supply (see Hackensack River Basin, diversions).

COOPERATION.--Gage-height record collected in cooperation with Hackensack Water Co. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--36 years, 89.5 m³/s (2.535 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,200 ft³/s (34.0 m³/s) Mar. 23, gage height, 5.22 ft (1.591 m); minimum, 17 ft³/s (0.48 m³/s) Mar. 3, 4, gage height, 1.59 ft (0.484 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,740 ft³/s (49.3 m³/s) Sept. 27, 1975, gage height, 7.15 ft (2.179 m); no flow part of Jan. 16, 1970.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	57	66	100	100	20	85	44	113	47	117	97
2	49	54	88	98	100	18	115	41	85	47	107	96
3	67	53	109	98	99	18	243	44	81	47	89	95
4	53	52	107	98	98	60	218	33	81	47	75	94
5	49	55	107	97	95	60	413	104	79	81	71	93
6	48	55	107	96	90	25	433	115	79	124	71	93
7	45	52	152	96	89	23	286	140	81	122	71	91
8	45	52	81	96	87	21	204	85	79	124	69	91
9	92	51	38	95	86	21	161	126	124	115	69	93
10	58	52	36	111	81	20	142	117	75	107	67	105
11	50	55	36	100	76	19	87	83	28	89	69	98
12	49	52	36	95	78	18	32	54	25	89	67	97
13	49	52	35	94	76	66	44	49	24	83	67	95
14	49	52	53	94	54	65	77	36	23	79	66	94
15	48	51	80	94	38	276	67	28	23	79	61	88
16	49	50	80	93	35	171	59	25	22	83	59	90
17	49	51	92	91	33	94	54	25	22	83	100	102
18	48	50	122	91	33	112	49	28	20	77	45	76
19	47	50	120	91	33	140	45	25	22	61	42	77
20	55	50	104	89	33	182	30	23	87	52	40	77
21	91	50	87	95	33	110	33	23	135	71	41	57
22	52	50	81	110	32	317	52	22	87	137	46	46
23	50	49	82	109	38	892	58	20	77	144	41	45
24	51	49	81	109	58	547	71	19	77	154	41	56
25	56	49	81	109	185	284	142	19	77	161	46	113
26	70	49	81	107	28	142	133	24	56	159	41	66
27	54	49	92	106	23	96	126	19	50	151	41	41
28	52	49	102	105	23	100	81	19	50	140	41	36
29	52	52	102	104	---	137	59	20	49	135	40	36
30	52	53	100	102	---	131	47	19	47	133	67	34
31	73	---	100	102	---	107	---	49	---	124	97	---
TOTAL	1702	1545	2638	3075	1834	4292	3646	1478	1878	3145	1964	2372
MEAN	54.9	51.5	85.1	99.2	65.5	138	122	47.7	62.6	101	63.4	79.1
MAX	92	57	152	111	185	892	433	140	135	161	117	113
MIN	45	49	35	89	23	18	30	19	20	47	40	34

CAL YR 1976 TOTAL 31152 MEAN 85.1 MAX 845 MIN 35
WTR YR 1977 TOTAL 29569 MEAN 81.0 MAX 892 MIN 18

01377000 HACKENSACK RIVER AT RIVERVALE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM .7UM-MF (COL./100 ML)	FECAL COLI-FORM (EC BROTH) (MPN)
NOV 10...	1110	52	384	8.2	5.5	2	11.1	1.0	1200	--
FEB 02...	1145	100	486	7.4	2.0	3	12.0	2.2	834	22
APR 13...	1125	52	351	7.7	12.5	5	10.4	2.0	250	<2
MAY 24...	1240	20	339	7.6	18.0	3	8.0	1.6	280	170
JUN 21...	0830	149	312	7.9	20.0	2	7.7	3.6	B2500	1600
JUL 27...	1110	151	302	8.4	23.0	1	7.0	6.4	--	33
AUG 15...	0940	63	298	7.4	23.0	6	4.4	3.1	--	350

DATE	FECAL STREP-TOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREP-TOCOCCI (MPN)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
NOV 10...	76	--	100	18	32	6.0	19	2.4	100
FEB 02...	76	<2	120	23	36	6.9	28	2.5	118
APR 13...	540	33	120	45	36	6.9	22	2.0	92
MAY 24...	320	240	140	64	41	8.5	21	2.0	93
JUN 21...	>5000	>2400	100	35	32	5.5	21	2.1	79
JUL 27...	--	79	84	23	25	5.3	23	2.0	72
AUG 15...	--	>2400	99	25	30	5.9	19	2.5	90

DATE	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOL-VED SUL-FIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)
NOV 10...	0	82	1.0	--	21	33	--	131	12
FEB 02...	0	97	7.5	--	21	52	--	223	5
APR 13...	0	75	2.9	--	25	37	--	224	5
MAY 24...	0	76	3.7	.0	22	37	2.9	192	0
JUN 21...	0	65	1.6	--	18	37	--	192	45
JUL 27...	1	61	.5	--	18	41	--	194	43
AUG 15...	0	74	5.7	--	20	36	--	173	6

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 10...	--	--	--	--	1.4	--	.03	--	5.0
FEB 02...	--	--	--	--	2.4	--	.04	--	6.7
APR 13...	--	--	--	--	1.1	--	.02	--	3.0
MAY 24...	--	--	--	--	1.3	--	.04	--	4.7
JUN 21...	--	--	--	--	1.1	--	.00	--	7.0
JUL 27...	.01	.00	.12	1.1	1.2	1.2	.21	.00	7.2
AUG 15...	.52	.06	.20	.90	1.1	1.7	.09	.02	7.1

01377000 HACKENSACK RIVER AT RIVERVALE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY								
24...	1240	0	1	60	0	0	0	3

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY								
24...	50	4	200	.0	4	0	30	0

01377500 PASCACK BROOK AT WESTWOOD, NJ

LOCATION.--Lat 40°59'33", long 74°01'19", Bergen County, Hydrologic Unit 02030103, on right bank 75 ft (23 m) upstream from Harrington Avenue in Westwood, 500 ft (150 m) downstream from Musquapsink Brook, and 2.3 mi (3.7 km) upstream from mouth.

DRAINAGE AREA.--29.6 mi² (76.7 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1934 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 28.62 ft (8.723 m) NGVD.

REMARKS.--Discharge records good. Flow regulated by Woodcliff Lake 3.0 mi (4.8 km) above station (see Hackensack River Basin, reservoirs in). Water diverted for municipal supply by Spring Valley Water Works and Supply Co., by pumpage from well fields in headwater area of Pascack Brook in vicinity of Spring Valley, NY, and by Park Ridge Water Department by pumping from wells above Woodcliff Lake probably reduces flow past this station.

COOPERATION.--Gage-height record collected in cooperation with Hackensack Water Co.

AVERAGE DISCHARGE.--43 years, 54.3 ft³/s (1.538 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft³/s (11.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 9	1415	451	12.8	3.30	1.006	Apr. 5	0800	638	18.1	3.80	1.158
Feb. 24	2315	864	24.5	4.41	1.344	June 20	2030	680	19.3	3.92	1.195
Mar. 13	2130	469	13.3	3.35	1.021	Aug. 17	1245	440	12.5	3.27	0.997
Mar. 23	0100	*1010	28.6	4.76	1.451						

Minimum discharge, 11 ft³/s (0.31 m³/s) Feb. 6, gage height, 1.43 ft (0.436 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,440 ft³/s (69.1 m³/s) Sept. 12, 1971, gage height, 7.57 ft (2.307 m); minimum, 5.6 ft³/s (0.16 m³/s) June 29, 1965.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	33	20	18	14	48	63	57	64	52	27	35
2	54	27	20	18	14	54	99	57	50	50	26	35
3	84	26	19	18	14	57	241	57	43	49	28	36
4	60	39	19	18	14	129	99	57	41	47	27	34
5	55	58	19	18	14	215	454	67	41	46	28	32
6	54	55	19	18	13	81	170	75	41	71	37	35
7	53	50	93	19	13	58	89	72	43	85	35	33
8	53	30	34	18	16	52	77	58	41	50	36	31
9	160	29	22	18	36	55	67	63	130	49	37	28
10	89	30	21	41	37	63	63	57	99	45	40	42
11	99	29	21	30	42	63	62	50	50	41	46	32
12	97	29	21	21	47	62	59	50	46	53	43	30
13	95	29	20	20	50	196	57	50	45	53	52	28
14	74	29	18	19	45	242	57	50	44	46	61	28
15	51	28	19	20	42	82	55	49	44	43	51	28
16	52	27	19	19	40	62	54	49	43	47	43	44
17	52	27	20	19	38	55	54	52	43	51	111	75
18	51	24	19	19	37	60	53	52	43	43	69	43
19	52	20	19	19	37	72	53	52	42	44	50	42
20	81	20	20	19	38	72	53	51	121	97	45	54
21	116	20	23	19	37	61	53	52	120	114	43	45
22	110	20	19	19	36	386	58	51	61	36	54	40
23	87	20	19	19	42	556	58	50	58	32	49	35
24	53	20	19	25	119	156	68	49	54	31	44	60
25	77	19	18	35	342	94	71	49	61	31	45	160
26	120	19	20	35	59	80	62	49	65	29	43	104
27	95	20	19	34	53	75	60	48	58	27	40	69
28	78	20	19	34	53	78	59	48	50	26	38	55
29	46	25	19	34	---	88	58	47	59	26	37	52
30	25	21	18	33	---	75	58	48	55	26	36	50
31	51	---	18	24	---	71	---	46	---	26	35	---
TOTAL	2278	843	693	720	1342	3498	2584	1662	1755	1466	1356	1415
MEAN	73.5	28.1	22.4	23.2	47.9	113	86.1	53.6	58.5	47.3	43.7	47.2
MAX	160	58	93	41	342	556	454	75	130	114	111	160
MIN	25	19	18	18	13	48	53	46	41	26	26	28

CAL YR 1976 TOTAL 20548 MEAN 56.1 MAX 645 MIN 10
WTR YR 1977 TOTAL 19612 MEAN 53.7 MAX 556 MIN 13

01378500 HACKENSACK RIVER AT NEW MILFORD, NJ

LOCATION.--Lat 40°56'52", long 74°01'34", Bergen County, Hydrologic Unit 02030103, on right bank upstream from two masonry dams and two lift gates at pumping plant of Hackensack Water Co., New Milford, 4.0 mi (6.4 km) downstream from Pascack Brook, and 21.8 mi (35.1 km) upstream from mouth. Water-quality samples collected at Oradell Avenue bridge in Oradell, 1,000 ft (305 m) upstream from gaging station.

DRAINAGE AREA.--113 mi^2 (293 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1921 to current year. Monthly discharge only for October 1921, published in WSP 1302.
CHEMICAL ANALYSES: Water years 1924, 1926, 1952, 1962 to current year.

REVISED DISCHARGE RECORDS: WSP 601: Drainage area. WSP 711: 1927-28(M). WRD-NJ 1970: 1969.

GAGE.--Water-stage recorder above south dam. Datum of gage is 6.25 ft (1.905 m) NGVD. October 1921 to Nov. 23, 1923, nonrecording gage and Nov. 23, 1923, to Sept. 25, 1934, water-stage recorder at same site at datum 0.05 ft (0.015 m) lower.

REMARKS.--Discharge records fair except those below 1.0 ft^3/s (0.028 m^3/s), which are poor. Records given herein represent flow over waste weirs only. Flow regulated by Lake De Forest, Lake Tappan, Woodcliff Lake 9.0 mi (14.5 km) upstream from station, and Oradell Reservoir 0.6 mi (1.0 km) upstream from station (see Hackensack River Basin, reservoirs in). Water diverted at gage, Lake De Forest, and West Nyack, NY, for municipal supply (see Hackensack River Basin, diversions).

COOPERATION.--Gage-height record collected in cooperation with Hackensack Water Co. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--56 years, 106 ft^3/s (3.002 m^3/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,980 ft^3/s (84.4 m^3/s) Mar. 23, gage height, 5.42 ft (1.652 m); no flow on many days during most months.

REVISIONS.--The maximum discharge for water year 1975 has been revised to 4,300 ft^3/s (122 m^3/s) Sept. 27, 1975, gage height, 7.54 ft (2.298 m), superseding figure published in WDR NJ-75-1.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,300 ft^3/s (122 m^3/s), revised, Sept. 27, 1975, gage height, 7.54 ft (2.298 m); no flow on many days during most years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	.60	.10	.00	.00	.00	35	.00	.00	.00	.00	.00
2	1.1	.60	.10	.00	.00	.00	232	.00	.00	.00	.00	.00
3	1.1	.60	.10	.00	.00	.00	527	.00	.00	.00	.00	.00
4	1.1	.60	.10	.00	.00	.00	413	.00	.00	.00	.00	.00
5	1.1	.60	.10	.00	.00	268	1400	.00	.00	.00	.00	.00
6	1.1	.60	.10	.00	.00	60	694	.00	.00	.00	.00	.00
7	1.1	.60	.10	.00	.00	21	363	.00	.00	.00	.00	.00
8	1.1	.60	.10	.00	.00	4.0	166	.00	.00	.00	.00	.00
9	1.1	.60	.10	.00	.00	.00	139	.00	.00	.00	.00	.00
10	1.1	.60	.10	.00	.00	.00	114	22	.00	.00	.00	.00
11	1.1	.60	.10	.00	.00	.00	84	32	.00	.00	.00	.00
12	1.1	.60	.10	.00	.00	.00	2.0	7.0	.00	.00	.00	.00
13	1.1	.60	.10	.00	.00	333	44	.00	.00	.00	.00	.00
14	1.1	.60	.10	.00	.00	200	143	.00	.00	.00	.00	.00
15	1.1	.60	.10	.00	.00	306	91	.00	.00	.00	.00	.00
16	.60	.60	.10	.00	.00	152	52	.00	.00	.00	.00	.00
17	.60	.60	.10	.00	.00	52	20	.00	.00	.00	.00	.00
18	.60	.60	.10	.00	.00	200	17	.00	.00	.00	.00	.00
19	.60	.60	.10	.00	.00	44	14	.00	.00	.00	.00	.00
20	.60	.60	.10	.00	.00	195	.00	.00	.00	.00	.00	.00
21	.60	.60	.10	.00	.00	80	.00	.00	.00	.00	.00	.00
22	.60	.60	.10	.00	.00	1290	.00	.00	.00	.00	.00	.00
23	.60	.60	.10	.00	.00	2200	.00	.00	.00	.00	.00	.00
24	.60	.10	.10	.00	.00	736	.00	.00	.00	.00	.00	.00
25	.60	.10	.10	.00	.00	317	.00	.00	.00	.00	.00	.00
26	.60	.10	.10	.00	.00	139	.00	.00	.00	.00	.00	.00
27	.60	.10	.10	.00	.00	88	.00	.00	.00	.00	.00	.00
28	.60	.10	.10	.00	.00	77	.00	.00	.00	.00	.00	.00
29	.60	.10	.10	.00	---	152	.00	.00	.00	.00	.00	.00
30	.60	.10	.10	.00	---	98	.00	.00	.00	.00	.00	.00
31	.60	---	.10	.00	---	70	---	.00	---	.00	.00	---
TOTAL	26.10	14.50	3.10	.00	.00	7082.00	4550.00	61.00	.00	.00	.00	.00
MEAN	.84	.48	.10	.000	.000	228	152	1.97	.000	.000	.000	.000
MAX	1.1	.60	.10	.00	.00	2200	1400	32	.00	.00	.00	.00
MIN	.60	.10	.10	.00	.00	.00	.00	.00	.00	.00	.00	.00

CAL YR 1976 TOTAL 21166.04 MEAN 57.8 MAX 1770 MIN .00
WTR YR 1977 TOTAL 11736.70 MEAN 32.2 MAX 2200 MIN .00

01378500 HACKENSACK RIVER AT NEW MILFORD, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM .7UM-MF (COL./ 100 ML)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREP-TOCOCCI (MPN)	HARD-NESS (CA,MG) (MG/L)
NOV 10...	1010	305	7.4	6.5	4	10.2	2.4	340	--	220	--	110
FEB 02...	1030	423	7.5	2.0	3	12.4	1.2	B36	11	B22	<2	120
APR 13...	0955	297	7.6	10.0	6	11.4	2.4	B380	<2	42	2	82
MAY 24...	1120	343	7.4	19.5	5	8.2	.7	<1	<2	B14	<2	120
JUN 21...	0955	335	7.5	22.0	1	7.9	1.0	--	2	--	2	110
JUL 27...	1155	330	7.6	25.0	1	7.2	2.1	--	<2	--	7	110
AUG 15...	1020	329	7.5	25.0	5	5.4	.9	--	<20	--	<20	110

DATE	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
NOV 10...	32	33	6.3	15	2.1	95	0	78	6.1	25	27
FEB 02...	16	37	7.1	30	2.2	127	0	104	6.4	25	56
APR 13...	31	25	4.8	22	1.8	62	0	51	2.5	21	36
MAY 24...	44	36	6.9	21	2.0	93	0	76	5.9	30	38
JUN 21...	33	34	6.7	19	1.9	94	0	77	4.8	30	35
JUL 27...	38	32	7.1	22	2.1	88	0	72	3.5	29	38
AUG 15...	34	32	6.7	22	2.5	93	0	76	4.7	25	40

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 10...	162	13	--	--	--	--	1.4	--	.04	--	5.3
FEB 02...	233	0	--	--	--	--	1.8	--	.02	--	6.2
APR 13...	186	7	--	--	--	--	1.0	--	.04	--	3.1
MAY 24...	210	0	--	--	.14	.30	.44	1.1	.00	--	7.1
JUN 21...	203	7	--	--	--	--	.80	--	.00	--	3.2
JUL 27...	226	17	.18	.03	.22	.64	.86	1.1	.06	.03	4.7
AUG 15...	179	6	.08	.01	.34	.54	.88	.97	.08	.02	6.2

RESERVOIRS IN HACKENSACK RIVER BASIN, NJ

01376700 DE FOREST LAKE.--Lat 41°06', long 73°57', Rockland County, NY, Hydrologic Unit 02030103, at dam on Hackensack River, 0.85 mi (1.37 km) north of West Nyack, NY. DRAINAGE AREA, 26.6 mi^2 (68.9 km^2). PERIOD OF RECORD, February 1956 to current year. GAGE, water-stage recorder. Datum of gage is NGVD.

Reservoir is formed by earthfill dam with sheet piling cutoff and concrete spillway; dam completed and storage began in February 1956. Total capacity at crest of dam 4,068,000,000 gal (15.40 hm^3), elevation, 80.00 ft (24.384 m). Crest of dam topped by two 50-foot (15.24 m) Bascule gates 5 ft (1.5 m) high. Flow regulated by 12-inch (0.3 m) Howell-Bunger valve at elevation, 59.25 ft (18.059 m) and 24-inch Howell-Bunger valve at elevation, 61.25 ft (18.669 m). Reservoir used for storage and water released by Hackensack Water Co., for municipal water supply. Record of elevation and contents furnished by Hackensack Water Co.

01376950 LAKE TAPPAN.--Lat 41°01'05", long 74°00'05", Bergen County, Hydrologic Unit 02030103, at dam on Hackensack River, 0.50 mi (0.80 km) north of Old Tappan. DRAINAGE AREA, about 49 mi^2 (127 km^2). PERIOD OF RECORD, October 1966 to current year. GAGE, water-stage recorder. Datum of gage is NGVD.

Reservoir is formed by earthfill dam, completed in 1966. Capacity at spillway level, 3,378,000,000 gal (12.79 hm^3), elevation, 55.00 ft (16.764 m). Flow regulated by four Bascule gates and one sluice gate. Water is released by Hackensack Water Co., for municipal water supply. Record of elevation and contents furnished by Hackensack Water Co.

01377450 WOODCLIFF LAKE.--Lat 41°01', long 74°03', Bergen County, Hydrologic Unit 02030103, at dam on Pascack Brook, 0.75 mi (1.21 km) north of Hillsdale. DRAINAGE AREA, 19.4 mi^2 (50.2 km^2). PERIOD OF RECORD, December 1929 to current year. Monthend contents only prior to September 1953, published in WSP 1302, 1722. GAGE, water-stage recorder. Datum of gage is NGVD.

Reservoir is formed by earthfill dam, completed about 1905. Capacity at spillway level, 835,000,000 gal (3.160 hm^3), elevation, 94.33 ft (28.752 m). Flow is regulated by flashboards and one 36-inch (0.9 m) gate in center of dam. Water is released for diversion at New Milford by Hackensack Water Co., for municipal supply. Record of elevation and contents furnished by Hackensack Water Co.

01378480 ORADELL RESERVOIR.--Lat 40°57', long 74°02', Bergen County, Hydrologic Unit 02030103, at dam on Hackensack River at Oradell. DRAINAGE AREA, 113 mi^2 (293 km^2). PERIOD OF RECORD, December 1922 to current year. Monthend contents only prior to September 1953, published in WSP 1302, 1722. GAGE, water-stage recorder. Datum of gage is NGVD.

Reservoir is formed by hollow concrete dam, completed in 1922. Capacity at spillway level, 2,850,000,000 gal (10.79 hm^3), elevation, 22.66 ft (6.907 m). Flow regulated by seven sluice gates (7 by 9 ft or 2.1 by 2.7 m). Water is released for diversion by Hackensack Water Co., 1 mi (2 km) downstream from dam for municipal supply. Record of elevation and contents furnished by Hackensack Water Co.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)
	01376700	DE FOREST LAKE †		01376950	LAKE TAPPAN †		01377450	WOODCLIFF LAKE †	
Sept. 30	84.74	5,556	-	52.96	2,837	-	90.72	646	-
Oct. 31	85.31	5,747	+9.5	54.74	3,401	+28.2	85.70	408	-11.9
Nov. 30	84.95	5,622	-6.4	54.00	3,163	-12.3	85.17	386	-1.1
Dec. 31	85.01	5,642	+1.0	51.51	2,409	-37.6	88.81	549	+8.1
CAL YR 1976	-	-	-0.4	-	-	-2.8	-	-	-0.9
Jan. 31	84.71	5,547	-4.7	45.71	946	-73.0	87.82	501	-2.4
Feb. 28	85.28	5,737	+10.5	49.55	1,869	+51.1	94.05	820	+17.6
Mar. 31	85.28	5,737	0	55.01	3,488	+80.8	95.27	886	+3.3
Apr. 30	85.19	5,705	-1.7	55.00	3,485	-0.2	94.67	853	-1.7
May 31	84.36	5,437	-13.4	54.83	3,430	-2.7	90.50	635	-10.9
June 30	84.54	5,494	+2.9	54.01	3,163	-13.8	88.90	553	-4.2
July 31	82.60	4,884	-30.5	47.66	1,398	-88.0	81.00	238	-15.8
Aug. 31	80.50	4,225	-33.0	46.23	1,055	-17.2	75.38	94	-7.2
Sept. 30	79.27	3,861	-18.7	46.80	1,192	+7.1	85.93	417	+16.7
WTR YR 1977	-	-	-7.2	-	-	-7.0	-	-	-1.0
	01378480	ORADELL RESERVOIR †							
Sept. 30	19.33	2,305	-						
Oct. 31	22.42	2,978	+33.6						
Nov. 30	18.48	2,134	-43.5						
Dec. 31	18.53	2,144	+0.5						
CAL YR 1976	-	-	-3.1						
Jan. 31	18.23	2,084	-3.0						
Feb. 28	22.28	3,046	+53.2						
Mar. 31	23.30	3,302	+12.8						
Apr. 30	21.82	2,937	-18.9						
May 31	18.35	2,183	-37.6						
June 30	18.75	2,267	+4.3						
July 31	18.51	2,217	-2.5						
Aug. 31	17.82	2,075	-7.1						
Sept. 30	21.10	2,773	+36.0						
WTR YR 1977	-	-	+2.0						

† Elevation at 0800 on first day of following month.

DIVERSIONS FROM HACKENSACK RIVER BASIN, NJ

01376699 Spring Valley Water Co., diverts water at De Forest Lake for municipal supply in Rockland County, NY. Records furnished by Spring Valley Water Co.

01376810 Village of Nyack, NY, diverts water from Hackensack River 100 ft (30.5 m) downstream from gaging station on Hackensack River at West Nyack, NY (sta 01376800) for municipal supply. Records furnished by Board of Water Commissioners of Nyack, NY.

01378490 Hackensack Water Co., diverts water for municipal supply from Oradell Reservoir at Haworth pumping station 2.0 mi (3.2 km) upstream from gaging station on Hackensack River at New Milford and from Hackensack River about 50 ft (15.2 m) above gaging station on Hackensack River at New Milford, NJ (sta 01378500). Records furnished by Hackensack Water Co.

01378520 Hackensack Water Co., diverts water from Hirshfeld Brook, a tributary of the Hackensack River, below the gaging station on Hackensack River at New Milford, NJ, for municipal supply. Records furnished by Hackensack Water Co.

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Month	SPRING VALLEY WATER CO.	WEST NYACK, NY	HACKENSACK WATER CO.
October	6.55	2.22	146
November	5.82	2.42	145
December	6.35	2.27	144
CAL YR 1976	7.48	2.34	151
January	8.02	2.43	151
February	10.4	2.45	135
March	6.44	2.42	145
April	7.31	2.45	153
May	14.2	2.54	171
June	11.0	2.59	163
July	20.9	2.74	183
August	14.7	2.60	146
September	13.3	2.56	141
WTR YR 1977	10.4	2.46	152

Tabulation of diversion by pumpage from sources other than the Hackensack River into Oradell Reservoir. These figures are included in diversions from Hackensack River as noted above.

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Month	SPARKILL CREEK (HUDSON RIVER BASIN)	HIRSHFELD BROOK (HACKENSACK RIVER BASIN)	SADDLE RIVER (PASSAIC RIVER BASIN)	WELLS TO SURFACE SUPPLY
October	0	0	0	0
November	0	0	0	0
December	0	0	0	0
CAL YR 1976	0	0.04	0.58	0
January	0	0	0	0.64
February	0	0.49	0	1.45
March	0.16	0.74	2.87	0.19
April	0	0	2.18	0
May	0	0	4.61	0.05
June	0	2.67	4.80	1.50
July	0	1.78	7.04	1.50
August	0	1.70	13.1	1.44
September	0	2.07	13.9	1.39
WTR YR 1977	0.01	0.79	4.06	0.67

01379000 PASSAIC RIVER NEAR MILLINGTON, NJ

LOCATION.--Lat 40°40'48", long 74°31'45", Somerset County, Hydrologic Unit 02030103, on right bank 200 ft (60.0 m) downstream from Davis Bridge, 0.7 mi (1.1 km) northwest of Millington, and 1.8 mi (2.9 km) downstream from Black Brook.

DRAINAGE AREA.--55.4 mi² (143.5 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: November 1903 to June 1906 (published as "at Millington"), October 1921 to current year. Monthly discharge only for some periods published in WSP 1302.
CHEMICAL ANALYSES: Water years 1923-25, 1962 to current year.
SEDIMENT ANALYSES: Water years 1971-75.

REVISED DISCHARGE RECORDS.--WSP 781: Drainage area. WSP 1552: 1905(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 215.60 ft (65.715 m) NGVD (levels from New Jersey Geological Survey bench mark). Nov. 25, 1903 to July 15, 1906, nonrecording gage at bridge 0.8 mi (1.3 km) downstream at different datum. Nov. 10, 1921 to Sept. 1, 1923, nonrecording gage at site 200 ft (60 m) downstream at present datum. Oct. 31, 1923 to July 3, 1925, nonrecording gage and concrete control at present site and datum.

REMARKS.--Discharge records excellent except those from Jan. 12 to Feb. 12, which are poor. Diversions from Osborn Pond by Commonwealth Water Co., Bernards Division, since June 24, 1903, for municipal supply (records given herein).

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--57 years (1904-05, 1921-77) 88.3 ft³/s (2.490 m³/s), 21.63 in/yr (550 mm/yr), adjusted for diversion.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s (14.2 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Feb. 26	2300	686	19.4	7.19	2.192
Mar. 23	0745	*950	26.9	7.85	2.393
Apr. 5	2000	674	19.1	7.16	2.182

Minimum discharge, 3.3 ft³/s (0.093 m³/s) Aug. 1, Sept. 13, 14, 15, gage height, 4.06 ft (1.237 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,000 ft³/s (56.6 m³/s) Jan. 9, 1905, (gage height, 7.8 ft or 2.38 m, from graph based on gage readings, site and datum then in use) from rating curve extended above 1,400 ft³/s (39.6 m³/s) on basis of velocity-area study; maximum gage height, 9.73 ft (2.966 m) Aug. 29, 1971; minimum discharge, 0.2 ft³/s (0.006 m³/s) Sept. 12, 13, 1966, gage height, 3.76 ft (1.146 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	134	20	12	7.5	304	76	43	19	19	4.5	8.9
2	22	108	23	11	7.2	185	91	39	29	17	8.7	7.8
3	23	93	15	12	7.0	126	280	39	18	14	8.4	7.5
4	36	76	11	11	7.0	167	256	35	15	12	15	6.4
5	26	59	11	12	7.0	409	541	86	13	11	10	5.6
6	26	46	9.9	11	6.8	388	642	167	13	9.9	9.2	5.4
7	24	39	45	11	7.0	319	556	150	20	12	13	5.9
8	22	35	130	11	7.0	250	421	104	16	17	19	5.1
9	44	28	106	11	7.6	157	283	71	30	13	22	4.5
10	76	26	70	14	9.0	104	185	53	136	11	17	4.3
11	52	26	60	16	11	86	138	43	128	10	17	4.5
12	48	26	46	16	14	74	104	37	84	11	12	4.0
13	40	23	40	16	26	147	89	33	67	17	17	3.5
14	32	23	24	15	52	463	82	28	52	12	26	3.3
15	26	22	22	14	84	433	73	26	35	10	18	3.7
16	23	21	23	13	80	358	66	24	50	8.4	14	4.5
17	20	20	25	13	64	262	59	22	36	8.9	13	16
18	19	20	25	16	48	185	53	22	28	7.3	12	13
19	16	20	22	14	43	190	48	44	25	6.2	11	11
20	28	20	23	13	32	172	44	29	21	9.5	9.2	15
21	145	19	35	12	29	150	44	25	28	12	8.1	24
22	175	18	24	11	26	376	41	23	22	7.8	23	15
23	124	16	21	11	28	922	39	20	18	5.6	30	14
24	100	16	17	10	77	874	43	17	16	4.5	17	33
25	95	15	13	10	547	714	96	17	25	4.3	29	43
26	116	16	15	9.5	642	502	89	15	89	6.7	19	126
27	132	17	14	9.0	638	322	122	13	50	5.1	14	152
28	100	17	14	8.5	443	202	110	13	30	4.5	12	120
29	82	21	14	8.2	---	150	84	12	33	4.0	11	80
30	64	24	13	8.0	---	122	59	13	24	4.0	9.4	60
31	82	---	13	7.8	---	96	---	13	---	4.8	9.2	---
TOTAL	1835	1044	943.9	367.0	3007.1	9209	4814	1276	1170	299.5	458.2	856.9
MEAN	59.2	34.8	30.4	11.8	107	297	160	41.2	39.0	9.66	14.8	28.6
MAX	175	134	130	16	642	922	642	167	136	19	30	152
MIN	16	15	9.9	7.8	6.8	74	39	12	13	4.0	4.5	3.3
(†)	2.2	2.4	2.5	2.1	2.0	2.2	2.4	2.8	2.5	2.9	1.6	1.6
MEAN‡	61.4	37.2	32.9	13.9	109	299	162	44.0	41.5	12.6	16.4	30.2
CFSM‡	1.11	0.67	0.59	0.25	1.97	5.40	292	0.79	0.75	0.23	0.30	0.55
IN‡	1.28	0.75	0.68	0.29	2.05	6.22	3.26	0.92	0.84	0.26	0.34	0.61

CAL YR 1976 TOTAL 26374.3 MEAN 72.1 MAX 826 MIN 2.5 MEAN‡ 73.6 CFSM‡ 1.33 IN‡ 18.26
WTR YR 1977 TOTAL 25280.6 MEAN 69.3 MAX 922 MIN 3.3 MEAN‡ 71.7 CFSM‡ 1.29 IN‡ 17.45

† Diversion, in cubic feet per second, from Osborn Pond for municipal supply. Records of diversion furnished by Commonwealth Water Co., Bernards Division.

‡ Adjusted for diversion.

NOTE.--No gage-height record Jan. 12 to Feb. 12.

01379000 PASSAIC RIVER NEAR MILLINGTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM .7UM-MF (COL./100 ML)	FECAL COLI-FORM (EC BROTH) (MPN)
NOV										
09...	0950	28	223	8.2	1.0	3	11.0	1.6	200	240
FEB										
09...	1000	E7.6	431	7.2	.0	8	3.2	1.0	B650	17
APR										
14...	1010	84	187	7.4	17.5	4	6.4	1.5	110	240
MAY										
11...	0825	43	181	7.6	11.5	5	9.0	1.6	230	540
JUN										
22...	0840	22	191	7.5	20.0	2	5.1	8.8	B600	79
JUL										
21...	1010	14	259	7.3	26.5	1	3.5	4.4	--	240
AUG										
11...	0945	17	215	7.3	24.0	2	4.5	1.9	--	350
SEP										
27...	0925	155	245	6.7	15.5	5	5.8	1.8	--	1600

DATE	FECAL STREP-TOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREP-TOCOCCI (MPN)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
NOV									
09...	460	350	67	4	16	6.5	14	2.8	77
FEB									
09...	140	33	100	24	25	10	33	2.9	93
APR									
14...	340	49	79	43	22	5.8	12	2.0	44
MAY									
11...	B170	23	78	39	20	6.8	12	1.4	48
JUN									
22...	1200	230	65	14	16	6.0	13	1.3	62
JUL									
21...	--	23	82	6	20	7.9	18	1.5	93
AUG									
11...	--	540	74	17	19	6.5	14	1.8	70
SEP									
27...	--	1600	67	32	17	6.0	18	3.2	43

DATE	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOL-VED SUL-FIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)
NOV									
09...	0	63	.8	--	30	19	--	137	10
FEB									
09...	0	76	9.4	--	33	54	--	234	9
APR									
14...	0	36	2.8	--	19	18	--	102	11
MAY									
11...	0	39	1.9	--	17	17	--	123	14
JUN									
22...	0	51	3.1	--	12	17	--	114	16
JUL									
21...	0	76	7.5	--	13	24	--	148	18
AUG									
11...	0	57	5.6	--	18	20	--	143	21
SEP									
27...	0	35	14	.0	34	25	14	153	10

01379000 PASSAIC RIVER NEAR MILLINGTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 09...	--	--	--	--	1.5	--	.08	--	9.0
FEB 09...	--	--	--	--	3.4	--	.52	--	6.1
APR 14...	--	--	--	--	1.1	--	.07	--	6.8
MAY 11...	--	--	--	--	1.4	--	.12	--	5.8
JUN 22...	--	--	--	--	1.4	--	.39	--	6.0
JUL 21...	.04	.00	.07	.74	.81	.85	.27	.15	6.5
AUG 11...	.11	.00	.04	1.1	1.1	1.2	.21	.08	4.9
SEP 27...	.28	.01	.03	.61	.64	.93	.16	.11	8.7

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
SEP 27...	0925	170	1	160	0	0	0	4

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
SEP 27...	130	29	60	.0	3	0	20	1

01379500 PASSAIC RIVER NEAR CHATHAM, NJ

LOCATION.--Lat 40°43'31", long 74°23'23", Morris County, Hydrologic Unit 02030103, on left bank 150 ft (46 m) downstream from Stanley Avenue bridge in Chatham, and 3.0 mi (4.8 km) upstream from Canoe Brook.

DRAINAGE AREA.--100 mi^2 (259 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: February 1903 to December 1911, Water years 1937 to current year. Monthly discharge only for some periods, published in WSP 1302.
CHEMICAL ANALYSES: Water years 1962 to current year.
SEDIMENT ANALYSES: Water years 1963-68, 1971-73, 1977.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: October 1937 to current year.
WATER TEMPERATURES: October 1966 to September 1968.
SUSPENDED-SEDIMENT DISCHARGE: July 1963 to September 1968.

GAGE.--Water-stage recorder and concrete control since Sept. 19, 1938. Datum of gage is 193.51 ft (58.982 m) NGVD. Prior to Dec. 31, 1911, nonrecording gage at bridge 150 ft (46 m) upstream at different datum.

REMARKS.--Discharge records fair. Diversion from Osborn Pond by Commonwealth Water Co., Bernards Division, since June 24, 1903, for municipal supply (records given herein).

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--48 years (1903-11, 1937-77), 168 ft^3/s (4.758 m^3/s), 22.87 in/yr (581 mm/yr), adjusted for diversion since 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft^3/s (22.7 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 24	2245	1130	32.0	5.91	1.801
Mar. 22	1630	*1390	39.4	6.35	1.935
Apr. 6	1345	983	27.8	5.66	1.725

Minimum discharge, 14 ft^3/s (0.40 m^3/s) Sept. 11, gage height, 3.11 ft (0.948 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,380 ft^3/s (95.7 m^3/s) Aug. 2, 1973, gage height, 9.36 ft (2.853 m) from floodmark; minimum, 2.0 ft^3/s (0.057 m^3/s) many days in May and June 1903, August and October 1905, September and October 1906, and September 11, 1944.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	210	42	36	22	749	133	88	38	41	20	23
2	40	168	36	34	21	532	168	75	50	35	26	23
3	77	140	32	34	21	318	430	74	46	30	34	21
4	59	122	29	33	20	359	430	68	32	27	41	19
5	56	107	26	30	20	587	814	140	28	25	36	18
6	48	92	24	27	20	620	956	349	32	25	31	18
7	45	77	29	25	20	552	931	270	37	26	49	18
8	39	63	258	25	21	447	794	200	37	46	55	18
9	191	57	221	25	22	319	607	151	164	44	46	17
10	104	50	146	50	24	212	415	123	310	28	43	26
11	101	48	106	64	27	161	251	89	216	26	48	16
12	71	47	91	57	50	138	182	76	135	35	40	16
13	65	44	90	44	100	311	146	67	102	50	80	17
14	56	41	100	36	150	610	130	59	83	38	60	18
15	47	39	55	35	200	697	117	51	68	29	42	16
16	39	38	48	35	171	616	106	47	76	27	36	22
17	36	37	49	39	120	495	95	44	64	24	31	38
18	33	37	49	46	101	383	89	53	52	21	30	35
19	32	37	44	43	76	349	83	80	45	21	27	29
20	31	35	48	40	69	286	76	69	50	45	25	56
21	377	34	76	37	66	244	72	56	61	28	22	47
22	289	33	56	34	63	712	71	52	48	27	62	40
23	275	32	59	32	65	1110	68	45	37	22	63	35
24	268	32	42	30	259	1240	78	41	33	19	51	85
25	245	31	35	28	781	1150	145	35	59	24	65	251
26	228	30	33	26	920	1010	157	34	155	26	51	223
27	200	33	33	25	943	796	188	31	116	22	36	211
28	168	37	33	24	893	552	183	28	89	19	29	177
29	130	39	34	23	---	338	153	26	84	18	27	123
30	100	42	32	23	---	212	119	26	53	18	25	88
31	150	---	32	22	---	168	---	27	---	16	22	---
TOTAL	3693	1832	1988	1062	5266	16273	8187	2574	2365	882	1255	1744
MEAN	119	61.1	64.1	34.3	188	525	273	83.0	78.8	28.5	40.5	58.1
MAX	377	210	258	64	943	1240	956	349	310	50	80	251
MIN	31	30	24	22	20	138	68	26	28	16	20	16
(†)	2.2	2.4	2.5	2.1	2.0	2.2	2.4	2.8	2.5	2.9	1.6	1.6
MEAN‡	121	63.5	66.6	36.4	190	527	275	85.8	81.3	31.4	42.1	59.7
CFSM‡	1.21	0.64	0.67	0.36	1.90	5.27	2.75	0.86	0.81	0.31	0.42	0.60
IN‡	1.39	0.71	0.77	0.42	1.98	6.08	3.07	0.99	0.91	0.36	0.49	0.67

CAL YR 1976 TOTAL 51163 MEAN 140 MAX 1090 MIN 16 MEAN‡ 141 CFSM‡ 1.41 IN‡ 19.33
WTR YR 1977 TOTAL 47121 MEAN 129 MAX 1240 MIN 16 MEAN‡ 131 CFSM‡ 1.31 IN‡ 17.84

† Diversion, in cubic feet per second, from Osborn Pond for municipal supply. Records of diversion furnished by Commonwealth Water Co., Bernards Division.

‡ Adjusted for diversion.

01379500 PASSAIC RIVER NEAR CHATHAM, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)
NOV 09...	1055	57	409	7.4	3.0	4	11.2	3.4	864	920
FEB 09...	1120	F22	699	7.2	.0	4	5.8	3.8	--	<2
09...	1445	27	--	--	.0	--	--	--	--	--
APR 14...	1120	130	306	7.1	18.0	1	9.0	3.3	48	1600
MAY 11...	0940	93	289	7.6	11.5	15	8.2	4.1	720	1300
JUN 22...	0950	50	431	7.6	21.0	2	3.1	7.9	2700	80
JUL 21...	1115	27	687	7.6	28.0	1	4.4	9.0	--	3500
AUG 11...	1030	47	1010	7.3	26.0	4	2.9	6.1	--	3500
SEP 27...	1100	214	401	7.1	16.0	40	7.2	3.7	--	1600

DATE	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
NOV 09...	480	23	91	27	22	8.7	40	3.0	78	0
FEB 09...	832	2	140	36	37	12	72	4.0	127	0
09...	--	--	--	--	--	--	--	--	--	--
APR 14...	44	350	71	33	18	6.3	28	2.2	46	0
MAY 11...	91	<20	80	26	20	7.3	23	1.9	66	0
JUN 22...	9500	330	92	18	23	8.3	44	2.5	90	0
JUL 21...	--	80	110	24	28	10	95	3.5	105	0
AUG 11...	--	1700	120	32	30	10	160	3.5	107	0
SEP 27...	--	540	78	37	20	6.9	43	3.2	50	0

DATE	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
NOV 09...	64	5.0	--	42	55	--	214	14	--	--
FEB 09...	104	13	--	59	110	--	382	8	--	--
09...	--	--	--	--	--	--	--	--	6	.46
APR 14...	38	5.8	--	40	34	--	167	50	--	--
MAY 11...	54	2.7	.0	29	31	11	188	26	--	--
JUN 22...	74	3.6	--	30	63	--	246	34	--	--
JUL 21...	86	4.2	--	88	95	--	412	40	--	--
AUG 11...	88	8.6	--	82	210	--	593	168	--	--
SEP 27...	41	6.4	.0	40	60	15	232	59	--	--

01379500 PASSAIC RIVER NEAR CHATHAM, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV									
09...	--	--	--	--	2.2	--	.65	--	8.6
FEB									
09...	--	--	--	--	7.0	--	1.3	--	6.3
09...	--	--	--	--	--	--	--	--	--
APR									
14...	--	--	--	--	1.4	--	.18	--	6.1
MAY									
11...	--	--	--	--	1.4	--	.42	--	4.1
JUN									
22...	--	--	--	--	1.1	--	.65	--	6.6
JUL									
21...	1.3	.28	.91	1.5	2.4	4.0	.82	.72	4.9
AUG									
11...	.67	.09	.70	1.4	2.1	2.9	.68	.30	6.3
SEP									
27...	1.1	.07	.23	.87	1.1	2.3	.36	.24	7.6

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY								
11...	0940	20	2	110	0	0	0	4
SEP								
27...	1100	0	1	140	0	0	0	12

DATE	DISSOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY								
11...	310	12	130	.0	12	0	40	1
SEP								
27...	70	37	110	.0	10	0	40	2

01380500 ROCKAWAY RIVER ABOVE RESERVOIR, AT BOONTON, NJ

LOCATION.--Lat 40°54'06", long 74°24'40", Morris County, Hydrologic Unit 02030103, on right bank at Morris Avenue in Boonton, 1.8 mi (2.9 km) upstream from dam at Boonton Reservoir.

DRAINAGE AREA.--116 mi^2 (300 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1937 to current year. Monthly discharge only for October 1937, published in WSP 1302.
CHEMICAL ANALYSES: Water years 1963 to current year.

REVISED DISCHARGE RECORDS.--WRD-NJ 1973: 1952(M). WRD-NJ 1974: 1938(m).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 364.47 ft (111.090 m) NGVD (levels from New Jersey Geological Survey bench mark).

REMARKS.--Discharge records fair. Flow regulated by Splitrock Reservoir 14.5 mi (23.3 km) above station (see Passaic River Basin, reservoirs in). Town of Boonton diverts water for municipal supply from Taylortown Reservoir on Stony Brook, capacity, 75,000,000 gal (283,900 m^3) and by pumping from wells in vicinity of Boonton. The mean diversion during the water year from Taylortown Reservoir was 0.6 ft^3/s (0.02 m^3/s). Rockaway Valley trunk sewer bypasses the station (see station 01381000).

COOPERATION.--Gage-height record collected in cooperation with Jersey City, Bureau of Water. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--40 years, 221 ft^3/s (6.259 m^3/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 950 ft^3/s (26.9 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 21	0915	1050	29.7	3.84	1.171
Dec. 7	2115	976	27.6	3.73	1.137
Feb. 25	1200	1600	45.3	4.71	1.436
Mar. 5	0730	1320	37.4	4.28	1.305
Mar. 14	0700	1360	38.5	4.35	1.326
Mar. 23	2330	a*3310	93.7	6.45	1.966
Apr. 5	1615	1370	38.8	4.36	1.329

a From rating curve extended above 2,400 ft^3/s (68 m^3/s).
Minimum discharge, 22 ft^3/s (0.62 m^3/s) Aug. 1, gage height, 1.77 ft (0.539 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,510 ft^3/s (99.4 m^3/s) June 2, 1952 (gage height, 6.62 ft or 2.018 m) from rating curve extended above 2,800 ft^3/s (79.3 m^3/s); minimum daily, 10 ft^3/s (0.28 m^3/s) Aug. 10, 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	370	87	110	50	528	496	302	93	70	25	58
2	130	291	89	119	48	420	482	262	114	62	29	59
3	140	274	72	89	45	350	827	243	82	54	62	60
4	131	236	78	91	42	554	621	225	71	50	91	58
5	101	244	74	89	40	1220	1130	370	68	50	55	58
6	93	236	72	87	39	927	1150	398	68	48	41	57
7	87	215	445	89	43	725	896	548	85	57	35	56
8	79	200	688	84	48	589	754	428	74	61	40	52
9	305	181	293	84	53	505	652	417	203	58	60	51
10	390	183	344	104	59	434	583	443	678	50	46	54
11	221	178	262	128	72	387	534	385	337	45	60	62
12	195	164	211	105	100	344	507	326	182	61	47	60
13	153	152	190	96	130	665	435	277	128	69	41	61
14	129	142	138	88	145	1280	389	226	105	55	38	61
15	110	140	177	83	120	944	359	201	93	45	38	63
16	99	138	155	80	115	743	336	181	111	39	38	68
17	92	128	150	76	100	605	306	172	85	36	73	157
18	84	123	144	73	90	551	294	169	76	35	95	105
19	78	118	133	69	82	576	277	164	75	32	75	100
20	140	111	131	66	80	544	249	144	120	47	70	134
21	877	104	164	70	88	493	230	127	497	40	64	128
22	545	101	103	74	83	1080	215	114	174	34	103	97
23	349	95	142	78	95	2830	220	106	102	27	99	88
24	269	84	109	80	195	1700	235	98	84	27	83	129
25	314	84	100	84	1360	1270	701	95	84	27	66	459
26	485	82	109	78	991	1020	528	91	135	28	71	498
27	403	85	97	72	702	857	586	83	101	25	65	448
28	317	84	94	65	619	745	476	78	87	23	62	227
29	257	102	104	61	---	694	389	70	118	24	62	139
30	215	106	92	57	---	610	342	70	83	24	60	101
31	370	---	104	54	---	555	---	66	---	24	57	---
TOTAL	7265	4751	5151	2583	5634	24745	15199	6879	4313	1327	1871	3748
MEAN	234	158	166	83.3	201	798	507	222	144	42.8	60.4	125
MAX	877	370	688	128	1360	2830	1150	548	678	70	103	498
MIN	78	82	72	54	39	344	215	66	68	23	25	51

CAL YR 1976 TOTAL 89323 MEAN 244 MAX 2060 MIN 31
WTR YR 1977 TOTAL 83466 MEAN 229 MAX 2830 MIN 23

01380500 ROCKAWAY RIVER ABOVE RESERVOIR, AT BOONTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)
NOV 09...	1220	179	183	7.5	2.5	2	13.8	1.5	84	80	76	33
FEB 03...	1230	F45	269	7.3	.0	1	15.0	4.3	94	49	50	5
APR 14...	1215	314	187	7.6	14.5	2	10.4	1.3	66	130	120	33
MAY 26...	0925	91	260	8.0	21.0	3	8.9	1.8	89	17	170	<20
JUN 23...	1000	102	212	7.9	20.0	5	9.1	1.8	640	330	410	350
AUG 01...	1315	23	323	8.3	23.5	1	8.8	1.4	--	110	--	350
17...	1400	73	270	8.0	22.0	1	8.4	.8	--	1600	--	1600

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 09...	60	16	15	5.5	10	1.2	54	0	44	2.7	17	17
FEB 03...	85	28	21	7.9	17	1.3	69	0	57	5.5	21	28
APR 14...	56	23	14	5.0	11	1.2	40	0	33	1.6	15	20
MAY 26...	120	64	29	11	14	1.2	68	0	56	1.1	19	26
JUN 23...	72	18	19	6.0	13	1.3	66	0	54	1.3	15	21
AUG 01...	110	32	26	11	20	1.5	95	0	78	.8	21	38
17...	91	25	23	8.2	15	1.5	81	0	66	1.3	16	28

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 09...	93	9	--	--	--	--	1.4	--	.02	--	2.6
FEB 03...	151	1	--	--	--	--	1.4	--	.02	--	5.9
APR 14...	96	2	--	--	--	--	1.1	--	.04	--	5.3
MAY 26...	159	16	--	--	--	--	1.3	--	.01	--	6.7
JUN 23...	122	13	--	--	--	--	1.3	--	.03	--	5.1
AUG 01...	185	9	.43	.01	.02	.38	.40	.84	.03	.03	6.0
17...	163	7	.52	.01	.04	.33	.37	.90	.05	.02	4.2

01381000 ROCKAWAY RIVER BELOW RESERVOIR, AT BOONTON, NJ

LOCATION.--Lat 40°53'47", long 74°23'36", Morris County, Hydrologic Unit 02030103, on right bank 2,000 ft (610 m) downstream from Boonton Reservoir Dam at Boonton.

DRAINAGE AREA.--119 mi^2 (308 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: March to December 1903; January, February 1904 (gage height only); January 1906 to September 1950 (monthly discharge only, published in WSP 1302) October 1950 to current year (figures of daily discharge for October 1950 to September 1954 published in Special Report 16 of New Jersey Department of Environmental Protection). Published as "near Boonton" 1903-4, and as "at Boonton" 1906-37.

REVISED DISCHARGE RECORDS.--WSP 1902: 1951-54.

GAGE.--Water-stage recorder. Concrete control since Nov. 5, 1936. Datum of gage is 195.68 ft (59.643 m) NGVD (levels from New Jersey Geological Survey bench mark). Mar. 15, 1903 to Feb. 2, 1904, nonrecording gage at site 1.9 mi (3.1 km) downstream at different datum. Jan. 1, 1906 to Mar. 3, 1918, nonrecording gage on Boonton Dam 2,000 ft (610 m) upstream at datum 305.25 ft (93.040 m) NGVD (levels from New Jersey Geological Survey bench mark).

REMARKS.--Discharge records fair. Records represent flow in river only. Sewage effluent enters river about 600 ft (183 m) below station (records given herein). Flow regulated by Boonton Reservoir (see Passaic River Basin, reservoirs in) 2,000 ft (610 m) above station, and by Splitrock Reservoir (see Passaic River Basin, reservoirs in) 16.5 mi (26.5 km) above station. Water diverted from Boonton Reservoir from municipal supply of Jersey City (see Hackensack River Basin, diversions).

COOPERATION.--Gage-height records for station and records of sewage effluent furnished by Jersey City, Bureau of Water.

AVERAGE DISCHARGE.--71 years (1906-77), 135 ft^3/s (3.823 m^3/s), adjusted for sewage effluent since October 1930.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,620 ft^3/s (74.2 m^3/s) Mar. 23, gage height, 7.13 ft (2.173 m); minimum, 5.2 ft^3/s (0.15 m^3/s) Sept. 26, gage height, 1.44 ft (0.439 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 7,560 ft^3/s (214 m^3/s), Oct. 10, 1903; no flow for many days in some years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	16	13	15	8.6	369	259	140	15	13	13	13
2	14	56	13	14	8.6	286	247	116	14	13	13	13
3	14	106	13	15	8.6	216	460	90	14	13	15	13
4	14	99	12	14	8.2	274	447	83	14	13	13	13
5	15	97	13	14	8.2	738	712	142	14	13	12	13
6	14	104	13	14	8.2	605	302	195	14	13	12	13
7	14	86	16	14	8.2	405	600	282	14	13	12	13
8	14	81	25	14	8.2	405	473	259	14	13	12	13
9	17	71	102	14	8.2	344	387	213	16	13	13	13
10	14	61	144	14	9.0	274	335	213	14	13	12	13
11	13	55	125	13	9.4	653	298	201	13	13	12	13
12	13	49	88	13	12	147	274	168	13	14	12	13
13	13	44	72	11	13	352	229	128	13	13	13	13
14	13	38	26	11	14	892	190	93	13	12	12	13
15	15	28	35	11	15	743	168	77	13	12	12	13
16	15	27	38	10	14	553	142	65	13	12	12	13
17	15	31	37	9.4	15	419	128	48	13	12	12	13
18	15	22	31	9.4	14	378	116	43	13	13	12	12
19	15	17	22	9.4	14	382	108	40	13	13	12	13
20	19	14	20	9.0	14	365	93	33	14	13	12	13
21	17	13	39	8.6	14	323	90	26	13	13	12	13
22	15	14	15	8.6	14	577	90	21	13	13	14	13
23	15	14	11	8.6	15	2370	80	15	13	12	15	14
24	15	14	14	9.0	24	1710	102	15	13	12	14	16
25	15	13	14	9.4	19	1090	323	14	13	12	13	19
26	17	13	15	9.8	14	759	319	14	13	12	13	17
27	15	13	15	9.8	17	577	323	14	13	12	13	13
28	15	13	15	9.8	282	486	278	14	13	12	13	13
29	15	13	15	9.4	---	447	204	14	13	12	13	13
30	15	13	15	8.6	---	391	163	14	13	12	13	13
31	17	---	15	8.6	---	335	---	14	---	13	13	---
TOTAL	462	1235	1041	348.4	617.4	17865	7940	2804	404	392	394	403
MEAN	14.9	41.2	33.6	11.2	22.1	576	265	90.5	13.5	12.6	12.7	13.4
MAX	19	106	144	15	282	2370	712	282	16	14	15	19
MIN	13	13	11	8.6	8.2	147	80	14	13	12	12	12
(†)	10.4	10.1	9.8	9.3	9.9	13.9	13.3	11.1	10.8	10.4	9.0	9.3

CAL YR 1976 TOTAL 38276.0 MEAN 105 MAX 1460 MIN 11 † 10.8
WTR YR 1977 TOTAL 33905.8 MEAN 92.9 MAX 2370 MIN 8.2 † 10.6

† Sewage effluent, in cubic feet per second.

01381200 ROCKAWAY RIVER AT PINE BROOK, NJ

LOCATION.--Lat 40°51'29", long 74°20'53", Morris County, Hydrologic Unit 02030103, at bridge on U.S. Route 46, at intersection with New Road.

DRAINAGE AREA.--136 mi² (352 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1963 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM .7UM-MF (COL./100 ML)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREP-TOCOCCI (MPN)	HARD-NESS (CA,MG) (MG/L)
NOV												
11...	0920	286	7.1	5.5	3	9.5	3.2	168	340	72	23	85
FEB												
10...	1000	454	7.8	.0	3	9.8	1.6	B1500	<2	<2	<2	120
APR												
14...	0910	209	7.4	11.5	5	9.6	2.7	120	350	64	79	63
MAY												
18...	1305	298	7.3	18.0	7	6.0	6.2	400	280	440	490	89
JUN												
22...	1255	334	7.4	18.5	1	5.9	8.3	3200	80	880	170	91
JUL												
21...	1320	355	7.5	23.5	1	5.7	9.4	--	1100	--	330	100
AUG												
11...	1215	387	7.3	21.0	0	4.7	7.3	--	1700	--	330	110

DATE	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOL-VED SUL-FIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
NOV												
11...	29	22	7.4	17	2.6	68	0	56	8.6	--	25	26
FEB												
10...	34	32	10	35	4.7	105	0	86	2.7	--	36	54
APR												
14...	30	17	5.0	14	1.7	40	0	33	2.5	--	18	24
MAY												
18...	31	24	7.1	20	2.7	71	0	58	5.7	.0	26	33
JUN												
22...	19	24	7.6	23	3.3	88	0	72	5.6	--	29	35
JUL												
21...	18	27	8.8	27	4.1	100	0	82	5.1	--	29	40
AUG												
11...	26	28	9.1	27	4.3	102	0	84	8.2	--	28	40

DATE	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV												
11...	--	144	15	--	--	--	--	2.2	--	.36	--	7.4
FEB												
10...	--	277	5	--	--	--	--	6.7	--	1.5	--	1.0
APR												
14...	--	105	6	--	--	--	--	1.1	--	.14	--	5.3
MAY												
18...	9.4	176	8	--	--	--	--	1.1	--	.49	--	7.2
JUN												
22...	--	189	30	--	--	--	--	1.3	--	.59	--	6.5
JUL												
21...	--	224	29	2.0	.39	1.9	.90	2.8	5.2	.76	.73	5.8
AUG												
11...	--	239	7	1.8	.40	1.4	1.1	2.5	4.7	.80	.62	6.2

01381200 ROCKAWAY RIVER AT PINE BROOK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY								
18...	1305	10	0	70	0	0	0	5

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY								
18...	240	8	150	.0	10	0	50	2

01381500 WHIPPANY RIVER AT MORRISTOWN, NJ

LOCATION.--Lat 40°48'21", long 74°27'22", Morris County, Hydrologic Unit 02030103, on left bank at Morristown sewage-disposal plant, 0.8 mi (1.3 km) downstream from Morristown, and 9.0 mi (14.5 km) upstream from mouth.

DRAINAGE AREA.--29.4 mi² (76.1 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: August 1921 to current year.
CHEMICAL ANALYSES: Water years 1923-24, 1926, 1962 to current year.
SEDIMENT ANALYSES: Water years 1971-75.

REVISED DISCHARGE RECORDS.--WSP 781: Drainage area. WSP 1552: 1922-23(M), 1924, 1925-27(M), 1928-29, 1930-32(M), 1933-34. WRD-NJ 1974: 1965.

GAGE.--Water-stage recorder. Concrete control since July 1, 1936. Datum of gage is 260.01 ft (79.251 m) NGVD (levels from New Jersey Geological Survey bench mark). Prior to July 16, 1930, nonrecording gage at same site and datum.

REMARKS.--Discharge records excellent. Flow occasionally regulated by operation of gates in Pocahontas Dam, 2.5 mi (4.0 km) above station.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--56 years, 51.1 ft³/s (1.447 m³/s) 23.60 in/yr (599 mm/yr).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft³/s (12.7 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 13	1315	648	18.4	4.28	1.305	June 9	2000	532	15.1	3.98	1.213
Mar. 22	2015	*1480	41.9	6.23	1.899	Aug. 9	0100	459	13.0	3.77	1.149
Apr. 5	1430	525	14.9	3.96	1.207						

Minimum discharge, 6.7 ft³/s (0.19 m³/s) Aug. 6, gage height, 1.59 ft (0.485 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,280 ft³/s (64.6 m³/s) Aug. 28, 1971, gage height, 7.60 ft (2.316 m); minimum, 2.8 ft³/s (0.08 m³/s) Aug. 27, 1932, gage height, 0.73 ft (0.223 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	65	20	21	33	58	81	52	58	23	24	17
2	31	35	21	22	29	49	129	51	36	21	22	16
3	61	32	18	20	28	45	226	49	27	20	36	16
4	43	30	18	21	24	186	113	54	25	20	45	16
5	24	29	18	21	21	280	430	120	25	20	17	16
6	22	29	18	18	19	101	234	73	34	21	16	16
7	21	26	143	21	20	78	148	61	43	22	23	16
8	20	26	118	21	21	68	127	51	27	26	20	19
9	118	25	39	20	18	64	111	62	160	21	82	16
10	65	25	29	35	21	59	103	50	203	19	23	16
11	27	25	28	41	25	56	97	47	54	19	22	15
12	23	24	29	35	37	54	92	45	34	61	18	14
13	21	23	27	31	49	270	85	44	31	30	56	14
14	21	23	22	27	51	324	81	40	29	21	33	15
15	19	22	24	28	38	120	75	39	30	18	23	14
16	19	22	25	24	30	95	70	39	41	18	19	25
17	18	22	25	21	25	82	67	36	26	17	23	45
18	18	23	24	27	22	95	64	38	26	17	20	17
19	18	22	23	40	23	105	62	39	27	17	17	18
20	78	21	27	35	25	94	59	36	34	41	17	43
21	223	21	34	28	23	82	58	35	45	20	16	32
22	52	21	22	25	21	705	56	33	25	17	64	18
23	30	20	22	25	32	705	55	32	24	16	26	18
24	33	20	21	25	103	261	84	30	24	16	28	61
25	45	20	20	23	361	194	150	29	55	18	33	180
26	113	20	24	21	136	160	85	28	59	19	20	133
27	45	21	21	21	79	136	107	26	28	16	18	76
28	32	21	22	25	81	124	70	25	31	17	17	40
29	29	31	22	21	---	116	62	23	34	17	17	29
30	26	25	21	24	---	101	55	25	25	17	17	25
31	109	---	21	27	---	92	---	25	---	16	16	---
TOTAL	1438	769	946	794	1390	4959	3236	1337	1320	661	828	996
MEAN	46.4	25.6	30.5	25.6	49.6	160	108	43.1	44.0	21.3	26.7	33.2
MAX	223	65	143	41	361	705	430	120	203	61	82	180
MIN	18	20	18	18	18	45	55	23	24	16	16	14
CFSM	1.58	.87	1.04	.87	1.69	5.44	3.67	1.47	1.50	.72	.91	1.13
IN.	1.82	.97	1.20	1.00	1.76	6.27	4.09	1.69	1.67	.84	1.05	1.26

CAL YR 1976 TOTAL 19333 MEAN 52.8 MAX 592 MIN 15 CFSM 1.80 IN 24.46
WTR YR 1977 TOTAL 18674 MEAN 51.2 MAX 705 MIN 14 CFSM 1.74 IN 23.63

01381500 WHIPPANY RIVER AT MORRISTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)
NOV 09...	1145	25	325	8.3	4.0	4	13.1	2.6	69500	9200	816000	>2400
FEB 09...	1310	21	429	7.8	.5	3	14.6	1.8	8270	<20	84	<20
APR 14...	1240	75	232	7.8	17.0	4	11.2	2.0	K2400	>2400	450	350
MAY 11...	1210	49	258	8.2	14.0	3	13.1	3.2	89700	35000	3000	490
JUN 23...	1410	25	287	8.1	23.5	4	9.6	3.3	670	2200	420	200
JUL 21...	1415	20	318	8.8	30.0	1	11.2	3.8	--	13000	--	<200
AUG 11...	1310	21	233	8.9	26.0	0	12.2	2.1	--	1100	--	200

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 09...	98	17	25	8.7	24	2.2	99	0	81	.8	37	27
FEB 09...	99	24	25	8.7	36	2.4	90	0	74	2.3	50	43
APR 14...	82	44	23	6.0	13	1.9	46	0	38	1.2	19	25
MAY 11...	78	28	20	6.8	15	2.0	61	0	50	.6	21	27
JUN 23...	97	39	26	7.8	17	2.2	71	0	58	.9	19	28
JUL 21...	95	27	24	8.6	21	2.5	79	2	68	.2	22	34
AUG 11...	76	24	20	6.4	14	2.5	59	2	52	.1	17	23

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 09...	172	7	--	--	--	--	2.0	--	.65	--	2.6
FEB 09...	235	0	--	--	--	--	3.1	--	.65	--	7.1
APR 14...	130	18	--	--	--	--	.80	--	.17	--	7.2
MAY 11...	164	9	--	--	--	--	1.4	--	.22	--	4.7
JUN 23...	161	4	--	--	--	--	2.8	--	.11	--	5.0
JUL 21...	183	2	1.5	.10	.09	.70	.79	2.4	.29	.28	5.4
AUG 11...	159	2	1.1	.07	.07	.62	.69	1.9	.23	.19	5.0

01381800 WHIPPANY RIVER NEAR PINE BROOK, NJ

LOCATION.--Lat 40°50'42", long 74°20'51", Morris County, Hydrologic Unit 02030103, at bridge on New Road, 0.3 mi (0.5 km) southeast of overpass of Interstate 280.

DRAINAGE AREA.--68.5 mi² (177.4 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1963 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM .7UM-MF (COL./100 ML)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREP-TOCOCCI (MPN)	HARD-NESS (CA,MG) (MG/L)
NOV 11...	0845	432	8.1	5.5	7	8.1	7.6	>7500	>24000	>3300	>2400	120
FEB 10...	1120	625	7.6	5.0	5	7.2	8.4	B12000	>2400	1200	1600	120
APR 14...	1040	343	7.3	16.5	8	5.8	8.6	14000	11000	2300	1300	110
MAY 18...	1130	492	7.5	22.5	9	3.3	11	>60000	4900	37	230	140
JUN 22...	1150	468	7.7	22.0	1	4.1	8.4	B95000	1100	4100	1300	130
JUL 21...	1235	398	7.5	28.0	1	3.5	9.1	--	22000	--	<200	120
AUG 11...	1135	464	7.5	26.0	1	3.4	10	--	7000	--	900	120

DATE	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOL-VED SUL-FIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
NOV 11...	21	32	10	33	3.4	121	0	99	1.5	--	54	36
FEB 10...	4	30	10	48	2.9	142	0	116	5.7	--	57	52
APR 14...	40	30	8.2	24	2.6	85	0	70	6.8	--	37	29
MAY 18...	23	40	9.9	40	3.8	143	0	117	7.2	.0	52	41
JUN 22...	16	35	9.9	39	3.3	139	0	114	4.4	--	48	43
JUL 21...	18	32	10	26	3.1	124	0	102	6.3	--	33	36
AUG 11...	10	35	9.1	35	4.0	134	0	110	6.8	--	50	43

DATE	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 11...	--	246	11	--	--	--	--	3.6	--	.36	--	7.8
FEB 10...	--	374	14	--	--	--	--	5.6	--	1.4	--	2.0
APR 14...	--	190	34	--	--	--	--	1.4	--	.23	--	6.5
MAY 18...	15	295	26	--	--	--	--	1.4	--	.59	--	7.0
JUN 22...	--	277	24	--	--	--	--	1.3	--	.49	--	7.2
JUL 21...	--	234	40	.69	.31	2.3	1.1	3.4	4.4	.75	.57	6.0
AUG 11...	--	319	49	.59	.16	2.0	2.8	4.8	5.6	.72	.40	6.0

01381800 WHIPPANY RIVER NEAR PINE BROOK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY 18...	1130	20	2	330	0	0	0	13

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY 18...	90	14	290	.0	8	0	30	1

01382000 PASSAIC RIVER AT TWO BRIDGES, NJ

LOCATION.--Lat 40°53'40", long 74°16'23", Passaic County, Hydrologic Unit 02030103, at bridge on Two Bridges Road, just upstream from Pompton River, and 0.3 mi (0.5 km) northeast of Two Bridges.

DRAINAGE AREA.--361 mi^2 (935 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1962 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1969 to September 1974.
pH: June 1969 to September 1974.
WATER TEMPERATURES: October 1962 to September 1974.
DISSOLVED OXYGEN: June 1969 to September 1974.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 11...	0955	395	7.2	4.5	6	8.1	5.2	100	790	90	130	110
FEB 08...	1310	843	7.5	.0	4	5.4	8.5	B210	49	94	49	170
MAR 29...	1420	169	7.0	8.0	9	9.3	1.8	56	2	42	8	46
MAY 26...	1220	585	7.4	24.0	2	2.2	6.8	1000	130	32	8	140
JUN 23...	1130	439	7.2	22.5	4	1.7	7.3	H2600	3500	--	540	110
JUL 27...	1345	594	7.5	24.0	1	3.0	7.3	--	540	--	17	150
AUG 15...	1150	391	7.3	23.0	35	2.1	6.4	--	9200	--	130	93

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 11...	28	28	9.4	27	3.5	100	0	82	10	--	42	37
FEB 08...	39	44	14	100	6.0	160	0	131	8.1	--	74	140
MAR 29...	25	12	3.9	12	1.7	26	0	21	4.2	--	19	20
MAY 26...	28	36	12	55	4.2	137	0	112	8.7	.0	55	72
JUN 23...	21	28	8.7	35	3.6	109	0	89	11	--	40	42
JUL 27...	32	39	12	60	4.7	144	0	118	7.3	--	53	75
AUG 15...	17	25	7.5	36	3.5	93	0	76	7.5	--	35	48

DATE	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 11...	--	235	11	--	--	--	--	3.9	--	.65	--	7.4
FEB 08...	--	468	5	--	--	--	--	10	--	1.5	--	--
MAR 29...	--	106	10	--	--	--	--	1.4	--	.05	--	--
MAY 26...	16	361	37	--	--	--	--	2.0	--	.95	--	7.0
JUN 23...	--	249	13	--	--	2.5	.70	3.2	4.2	.80	--	5.4
JUL 27...	--	354	39	2.0	.20	3.3	1.4	4.7	6.9	1.1	.84	5.2
AUG 15...	--	218	45	1.2	.19	1.9	1.1	3.0	4.4	.84	.62	5.3

01382000 PASSAIC RIVER AT TWO BRIDGES, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY								
26...	1220	50	1	220	0	0	0	6

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY								
26...	90	11	320	.3	17	0	20	2

01382500 PEQUANNOCK RIVER AT MACOPIN INTAKE DAM, NJ

LOCATION.--Lat 41°01'00", long 74°23'47", Morris County, Hydrologic Unit 02030103, on left bank at Macopin intake dam of Newark water-works, 0.4 mi (0.6 km) downstream from Macopin River, and 3.0 mi (4.8 km) northwest of Butler. Water-quality samples collected at bridge, 700 ft (213 m) downstream of gaging station.

DRAINAGE AREA.--63.7 mi² (165.0 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: January 1898 to current year. Monthly discharge only for some periods, published in WSP 1302. Records for January 1892 to December 1897, published in WSP 541, have been found to be unreliable and should not be used.
CHEMICAL ANALYSES: Water years 1923, 1962-69, 1973 to current year.

GAGE.--Water-stage recorder above dam. Datum of gage is 570.00 ft (173.736 m) NGVD (levels by New Jersey Geological Survey). Prior to May 22, 1970, at datum 13.55 ft (4.130 m) higher.

REMARKS.--Discharge records poor. Records given herein represent flow over intake dam only. Flow regulated by Canistear, Oak Ridge, Clinton, Charlotteburg Reservoirs, and Echo Lake (see Passaic River Basin, reservoirs in). Water diverted above intake dam for municpal supply of city of Newark (see Passaic River Basin, diversions).

COOPERATION.--Gage-height record collected in cooperation with the Department of Public Affairs, Division of Water Supply, City of Newark. Prior to May 22, 1970, discharge figures furnished by city of Newark. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--79 years, 51.7 ft³/s (1.464 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 384 ft³/s (10.9 m³/s) Mar. 22, gage height, 14.15 ft (4.313 m); no flow part of March, April, July, August, and September.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 6,100 ft³/s (173 m³/s) Oct. 10, 1903, gage height, 17.4 ft (5.30 m) present datum; no flow over dam during several months of most years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	30	7.5	11	4.5	6.0	.00	3.0	9.0	1.0	2.0	4.5
2	11	16	7.5	9.0	3.0	1.0	30	2.0	11	.00	1.0	2.0
3	13	16	7.5	7.5	3.0	.00	71	2.0	4.5	1.0	3.0	1.0
4	13	16	9.0	7.5	3.0	22	3.0	2.0	3.0	1.0	3.0	1.0
5	11	13	9.0	7.5	3.0	34	43	6.0	4.5	1.0	2.0	1.0
6	11	13	11	6.0	7.5	9.0	43	16	4.5	1.0	2.0	1.0
7	9.0	11	71	7.5	9.0	6.0	95	26	2.0	2.0	3.0	.00
8	9.0	11	43	6.0	7.5	2.0	77	11	2.0	2.0	1.0	1.0
9	30	9.0	26	4.5	7.5	.00	48	16	11	1.0	1.0	1.0
10	26	7.5	16	7.5	4.5	.00	26	77	26	1.0	1.0	1.0
11	13	9.0	16	9.0	6.0	.00	.00	108	6.0	1.0	1.0	.00
12	11	9.0	11	9.0	6.0	.00	.00	101	3.0	2.0	1.0	.00
13	11	7.5	9.0	13	7.5	19	.00	30	3.0	1.0	2.0	.00
14	11	7.5	7.5	9.0	6.0	22	.00	6.0	3.0	1.0	2.0	.00
15	9.0	7.5	7.5	11	4.5	7.5	.00	6.0	3.0	1.0	1.0	.00
16	9.0	7.5	7.5	9.0	4.5	2.0	.00	4.5	3.0	1.0	2.0	1.0
17	9.0	7.5	7.5	9.0	3.0	.00	.00	4.5	3.0	2.0	6.0	3.0
18	9.0	7.5	7.5	11	3.0	.00	.00	4.5	2.0	.00	2.0	1.0
19	9.0	6.0	7.5	16	3.0	.00	.00	4.5	2.0	.00	1.0	1.0
20	26	7.5	7.5	7.5	3.0	.00	.00	4.5	2.0	1.0	.00	2.0
21	95	6.0	9.0	6.0	3.0	.00	.00	6.0	3.0	.00	1.0	1.0
22	43	6.0	7.5	6.0	3.0	128	.00	6.0	1.0	.00	3.0	1.0
23	30	6.0	7.5	6.0	4.5	34	3.0	6.0	2.0	.00	2.0	1.0
24	26	6.0	7.5	6.0	26	114	13	6.0	2.0	.00	2.0	3.0
25	30	6.0	7.5	6.0	101	101	16	4.5	2.0	2.0	1.0	22
26	48	6.0	7.5	13	38	11	11	4.5	2.0	.00	1.0	22
27	30	6.0	7.5	6.0	30	6.0	13	4.5	2.0	.00	1.0	16
28	26	7.5	7.5	6.0	22	6.0	6.0	4.5	2.0	1.0	1.0	4.5
29	22	11	7.5	4.5	---	6.0	3.0	4.5	2.0	1.0	1.0	2.0
30	19	7.5	7.5	4.5	---	2.0	3.0	4.5	1.0	1.0	1.0	2.0
31	43	---	7.5	4.5	---	.00	---	4.5	---	1.0	3.0	---
TOTAL	671.0	287.0	380.0	246.0	326.5	538.50	504.00	490.0	126.5	27.00	54.00	96.00
MEAN	21.6	9.57	12.3	7.94	11.7	17.4	16.8	15.8	4.22	.87	1.74	3.20
MAX	95	30	71	16	101	128	95	108	26	2.0	6.0	22
MIN	9.0	6.0	7.5	4.5	3.0	.00	.00	2.0	1.0	.00	.00	.00

CAL YR 1976 TOTAL 12551.60 MEAN 34.3 MAX 557 MIN 4.1
WTR YR 1977 TOTAL 3746.50 MEAN 10.3 MAX 128 MIN .00

01382500 PEQUANNOCK RIVER AT MACOPIN INTAKE DAM, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)
NOV												
10...	1440	9.0	122	7.7	4.0	1	13.0	1.1	B2	--	20	--
FEB												
03...	1145	3.0	225	7.0	.0	5	14.1	1.5	B1800	2	B30	<2
APR												
12...	1335	.00	112	7.4	10.5	2	11.4	1.0	B11	<2	B280	<2
MAY												
25...	1045	4.5	156	8.7	21.0	3	8.5	2.1	43	23	B180	5
JUN												
15...	1145	3.0	139	7.6	20.5	1	9.0	1.0	74	4	500	<2
AUG												
01...	1215	2.0	222	8.0	22.0	2	8.6	2.8	--	49	--	540
17...	1250	13	229	7.6	23.0	1	8.3	1.8	--	540	--	920

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV												
10...	37	12	9.2	3.3	7.9	.6	30	0	25	1.0	13	13
FEB												
03...	56	22	14	5.1	17	.8	41	0	34	6.6	16	30
APR												
12...	42	25	10	4.1	7.1	.7	21	0	17	1.3	12	13
MAY												
25...	72	47	18	6.5	11	.8	28	1	25	.1	13	20
JUN												
15...	39	16	10	3.5	10	.7	28	0	23	1.1	13	17
AUG												
01...	59	17	15	5.3	18	.8	51	0	42	.8	12	33
17...	62	22	16	5.4	19	.9	49	0	40	2.0	11	35

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV											
10...	76	6	--	--	.01	--	.31	--	.00	--	5.0
FEB											
03...	127	5	--	--	--	--	1.7	--	.09	--	4.8
APR											
12...	80	6	--	--	--	--	.70	--	.01	--	1.8
MAY											
25...	87	0	--	--	.01	.48	.49	.49	.01	--	4.1
JUN											
15...	90	8	--	--	--	--	1.3	--	.01	--	5.7
AUG											
01...	115	4	.09	.00	.06	.53	.59	.68	.03	.00	5.1
17...	130	95	.03	.00	.04	.35	.39	.42	.03	.00	7.0

01383500 WANAQUE RIVER AT AWOSTING, NJ

LOCATION.--Lat 41°09'31", long 74°20'00", Passaic County, Hydrologic Unit 02030103, on right bank 700 ft (210 m) downstream from dam at outlet of Greenwood Lake at Awosting.

DRAINAGE AREA.--27.1 mi² (70.2 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: May 1919 to current year. Prior to October 1940, published as "at Greenwood Lake".

REVISED DISCHARGE RECORDS.--WSP 781: Drainage area. WSP 1552: 1922(M), 1928(M), 1936.

GAGE.--Water-stage recorder. Concrete control since Oct. 31, 1938. Datum of gage is 601.32 ft (183.282 m) NGVD (levels from New Jersey Geological Survey bench mark). Prior to Apr. 1, 1926, nonrecording gage and Apr. 1, 1926, to Oct. 31, 1938, water-stage recorder at site 100 ft (30 m) upstream at same datum.

REMARKS.--Discharge records good. Flow completely regulated by Greenwood Lake (see Passaic River Basin, reservoirs in).

COOPERATION.--Gage-height record collected in cooperation with North Jersey District Water Supply Commission.

AVERAGE DISCHARGE.--58 years, 52.4 ft³/s (1.484 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.66 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 21	2200	232	6.57	3.23	0.985	Mar. 23	1145	*531	15.0	3.92	1.195
Feb. 26	0600	323	9.15	3.50	1.067	Apr. 6	1645	248	7.02	3.28	1.000
Mar. 5	1200	245	6.94	3.27	0.997						

Minimum discharge, 0.20 ft³/s (0.006 m³/s) June 28, gage height, 1.25 ft (0.381 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,300 ft³/s (36.8 m³/s) Oct. 16, 1955 (gage height, 5.85 ft or 1.783 m) from rating curve extended above 750 ft³/s (21.24 m³/s) on basis of laboratory rating; no flow at times when gates at Greenwood Lake were closed and water below the spillway.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	116	20	20	7.9	215	93	46	4.0	4.9	6.2	6.4
2	24	87	19	17	8.3	177	87	41	6.2	4.9	6.2	6.4
3	35	75	18	16	8.3	151	151	40	8.3	4.7	6.2	6.4
4	41	68	15	14	9.7	153	144	34	4.2	4.4	6.2	6.4
5	37	67	14	13	10	238	194	49	2.7	4.2	6.7	6.4
6	33	59	13	12	12	226	232	54	2.4	4.2	7.3	6.4
7	30	53	58	14	10	201	212	71	4.9	4.2	7.3	6.4
8	28	50	123	13	7.3	172	184	65	2.1	4.2	7.3	6.4
9	59	39	119	13	6.7	149	153	87	8.6	4.4	7.3	6.4
10	114	37	103	20	6.4	130	129	99	49	4.4	7.0	6.4
11	99	36	93	22	6.2	110	110	87	46	4.4	7.0	6.4
12	80	33	80	21	7.0	95	101	76	36	4.2	7.0	6.4
13	67	30	71	18	8.6	121	84	70	32	4.4	7.0	6.4
14	61	26	54	18	11	184	75	56	26	5.4	7.0	6.4
15	44	25	49	21	13	179	58	44	24	6.4	7.0	5.1
16	41	24	43	19	15	161	50	35	20	6.4	7.0	3.4
17	33	22	42	17	16	138	39	30	14	6.4	7.0	3.2
18	29	21	39	16	15	127	35	27	14	6.4	7.0	3.0
19	22	21	34	14	14	127	31	26	14	6.4	7.0	2.9
20	37	20	32	13	17	103	27	25	10	6.4	7.0	2.7
21	201	19	39	12	20	103	26	23	10	6.4	7.0	2.4
22	217	27	31	12	18	170	24	20	7.3	6.2	7.3	2.2
23	184	27	29	10	17	496	26	18	4.0	6.2	7.3	3.8
24	157	24	27	9.7	26	451	31	16	2.5	6.2	7.3	4.9
25	146	21	24	10	254	320	46	14	1.9	6.2	7.3	5.1
26	155	17	27	10	316	232	50	13	2.7	6.2	7.3	5.1
27	136	14	26	9.7	284	179	67	9.7	.59	6.2	7.3	8.3
28	114	16	25	9.3	251	153	70	6.7	.25	6.2	7.3	14
29	95	25	24	19	---	140	62	7.6	3.2	6.2	6.7	20
30	80	23	22	27	---	125	53	4.0	5.4	6.2	6.4	18
31	95	---	21	12	---	112	---	2.9	---	6.2	6.4	---
TOTAL	2518	1122	1334	471.7	1395.4	5638	2644	1196.9	366.24	169.7	215.3	193.7
MEAN	81.2	37.4	43.0	15.2	49.8	182	88.1	38.6	12.2	5.47	6.95	6.46
MAX	217	116	123	27	316	496	232	99	49	6.4	7.3	20
MIN	22	14	13	9.3	6.2	95	24	2.9	.25	4.2	6.2	2.2

CAL YR 1976 TOTAL 18859.60 MEAN 51.5 MAX 342 MIN 1.2
WTR YR 1977 TOTAL 17264.94 MEAN 47.3 MAX 496 MIN .25

PASSAIC RIVER BASIN

01384000 WANAQUE RIVER AT MONKS, NJ

LOCATION.--Lat 41°07'14", long 74°17'41", Passaic County, Hydrologic Unit 02030103, on left bank just upstream from Wanaque Reservoir and 0.3 mi (0.5 km) downstream from highway bridge at Monks.

DRAINAGE AREA.--40.4 mi² (104.6 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1934 to current year. Monthly discharge only for October to December 1934, published in WSP 1302.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 303.17 ft (92.406 m) NGVD (levels from New Jersey Geological Survey bench mark).

REMARKS.--Discharge records good. Records given herein include flow over spillway, through ports in dam, and down fish ladder in dam. Flow regulated by Greenwood Lake (see Passaic River Basin, reservoirs in).

COOPERATION.--Gage-height record collected in cooperation with North Jersey District Water Supply Commission.

AVERAGE DISCHARGE.--43 years, 80.9 ft³/s (2.291 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft³/s (11.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 25	0400	927	26.3	2.23	0.680
Mar. 5	0215	482	13.6	1.63	0.497
Mar. 22	2015	a*1400	39.6	2.66	0.811

a From rating curve extended above 1,500 ft³/s (42.5 m³/s).
Minimum discharge, 2.4 ft³/s (0.068 m³/s) June 29, 30, gage height 0.07 ft (0.021 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,640 ft³/s (103 m³/s) Aug. 19, 1955 (gage height, 4.15 ft or 1.265 m, from high-water mark in gage house) from rating curve extended above 1,000 ft³/s (28.3 m³/s); no flow part of day in some years just after waste gate was closed and water was below intake to ports.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	151	30	30	22	266	141	82	9.6	6.5	7.0	7.5
2	34	124	29	29	20	225	141	74	15	6.5	7.0	7.5
3	58	105	34	29	17	191	257	72	14	6.0	8.0	7.5
4	62	96	30	25	21	253	213	65	11	6.0	8.0	7.5
5	54	93	32	26	28	396	341	102	8.5	5.5	7.0	7.0
6	46	85	26	25	23	309	337	99	8.0	5.5	8.0	7.0
7	39	77	162	24	20	266	287	124	9.6	6.0	8.5	7.0
8	35	72	187	27	15	225	249	105	9.6	6.5	8.5	7.0
9	105	60	151	37	13	198	209	134	27	7.0	8.0	7.0
10	148	56	130	35	12	173	183	151	99	6.0	8.0	7.0
11	118	52	117	46	13	151	162	130	60	6.0	8.0	7.0
12	99	50	108	42	15	134	148	117	48	6.0	8.0	6.5
13	88	46	102	37	24	233	127	108	40	6.0	8.0	6.5
14	74	42	141	32	29	305	117	90	34	5.5	8.0	6.5
15	65	40	69	37	27	253	99	74	30	7.0	9.6	6.5
16	54	39	65	35	27	217	88	65	27	7.5	8.0	6.0
17	42	37	62	29	26	187	74	56	21	7.5	9.6	7.5
18	35	35	58	46	24	176	67	50	17	7.5	9.6	5.5
19	30	34	52	44	22	176	60	46	17	7.5	8.5	5.0
20	245	34	50	26	26	151	54	42	15	7.5	8.5	5.0
21	291	30	60	22	32	144	52	39	13	7.5	8.0	5.0
22	261	39	52	21	32	506	50	34	11	7.0	9.6	4.1
23	213	40	44	25	30	776	50	30	8.5	7.0	8.5	4.1
24	180	37	40	24	74	550	67	27	6.0	7.0	8.5	9.6
25	176	32	37	19	583	402	111	24	5.0	7.0	8.0	58
26	202	29	40	19	402	309	93	22	4.6	7.0	7.5	82
27	166	26	39	18	346	253	127	18	5.0	6.5	7.5	60
28	141	25	37	18	318	221	117	14	3.6	6.5	7.5	30
29	120	37	35	62	---	206	105	14	3.2	7.0	7.5	29
30	105	37	32	88	---	180	93	11	4.1	7.0	7.5	26
31	151	---	31	27	---	162	---	9.6	---	7.0	7.5	---
TOTAL	3469	1660	2082	1004	2241	8194	4219	2028.6	584.3	206.0	251.4	441.8
MEAN	112	55.3	67.2	32.4	80.0	264	141	65.4	19.5	6.65	8.11	14.7
MAX	291	151	187	88	583	776	341	151	99	7.5	9.6	82
MIN	30	25	26	18	12	134	50	9.6	3.2	5.5	7.0	4.1

CAL YR 1976 TOTAL 29199.4 MEAN 79.8 MAX 571 MIN 3.1
WTR YR 1977 TOTAL 26381.1 MEAN 72.3 MAX 776 MIN 3.2

01384500 RINGWOOD CREEK NEAR WANAQUE, NJ

LOCATION.--Lat 41°07'36", long 74°15'52", Passaic County, Hydrologic Unit 02030103, on right bank 500 ft (150 m) upstream from Wanaque Reservoir, 0.7 mi (1.1 km) downstream from Ringwood Mill Pond Dam, and 6.5 mi (10.5 km) north of Wanaque.

DRAINAGE AREA.--19.1 mi² (49.5 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1934 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 302.67 ft (92.254 m) NGVD (levels from New Jersey Geological Survey bench mark).

REMARKS.--Discharge records fair. Records given herein include flow over spillway and through ports in dam or through waste gate in dam. Flow slightly regulated by Ringwood Mill Pond, Sterling, and Sterling Forest Lakes, and several smaller lakes above station.

COOPERATION.--Gage-height record collected in cooperation with North Jersey District Water Supply Commission.

AVERAGE DISCHARGE.--43 years, 33.1 ft³/s (0.937 m³/s), 23.53 in/yr (599 mm/yr), unadjusted.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 230 ft³/s (6.51 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 25	0200	723	20.5	2.95	0.899
Mar. 5	0230	249	7.05	1.75	0.533
Mar. 22	2130	*828	23.4	3.16	0.963

Minimum daily discharge, 0.32 ft³/s (0.009 m³/s) Sept. 7, 8, 9, 12.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,150 ft³/s (32.6 m³/s) Mar. 30, 1951, gage height, 3.74 ft (1.140 m) from floodmark; no flow part of day in most years just after waste gate was closed and water was below ports.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	53	13	18	7.0	91	59	29	10	3.6	2.5	.52
2	10	41	12	17	6.5	78	65	28	12	3.4	2.6	.64
3	22	37	11	14	6.5	68	118	25	8.7	2.8	3.0	.64
4	19	36	11	14	7.0	111	86	22	7.4	2.8	3.1	.52
5	13	34	11	13	7.4	195	155	50	6.5	2.8	2.5	.40
6	12	32	10	12	7.8	129	137	44	7.0	2.8	2.5	.36
7	11	30	71	13	10	107	111	48	9.1	3.4	2.8	.32
8	10	28	70	15	11	91	95	38	8.2	4.5	2.4	.32
9	39	25	44	23	7.4	79	83	50	28	4.8	2.2	.32
10	34	24	38	32	6.1	70	73	57	62	3.6	2.4	.36
11	22	23	37	19	7.0	65	65	47	27	3.1	2.9	.36
12	19	22	35	13	9.1	63	59	41	17	3.4	1.0	.32
13	16	21	31	12	13	116	59	36	14	3.6	1.0	.40
14	15	20	27	12	15	155	53	31	12	2.5	1.9	.52
15	14	19	25	13	13	116	47	27	12	2.2	2.8	.40
16	13	18	24	18	12	100	39	22	10	2.2	1.1	1.0
17	12	17	25	17	10	84	32	20	9.1	2.8	3.9	2.2
18	11	17	23	36	9.1	83	28	19	8.7	2.2	3.9	1.3
19	10	17	21	11	9.1	83	25	18	8.2	1.9	1.7	1.5
20	38	16	21	10	9.6	73	22	17	7.8	1.9	1.1	1.7
21	140	14	23	9.6	9.6	68	21	15	7.8	1.9	.88	2.5
22	65	14	19	13	9.6	341	20	15	7.0	1.5	2.2	1.5
23	45	14	18	24	11	512	20	13	5.7	1.1	2.2	1.3
24	41	13	16	11	53	220	36	13	4.8	1.0	1.1	7.8
25	44	13	15	8.7	395	145	60	12	4.8	2.2	.76	44
26	61	13	17	8.7	145	116	42	11	5.7	2.1	.76	83
27	44	13	16	8.7	118	98	54	9.1	4.8	2.0	.64	65
28	38	13	18	8.2	112	91	44	8.7	4.5	1.9	.64	25
29	37	15	16	14	---	88	38	7.8	4.5	2.0	.64	15
30	40	15	15	10	---	76	32	8.2	4.2	2.2	.40	12
31	64	---	17	14	---	68	---	7.8	---	2.4	.52	---
TOTAL	968.5	667	750	461.9	1036.8	3780	1778	789.6	338.5	80.6	58.04	271.20
MEAN	31.2	22.2	24.2	14.9	37.0	122	59.3	25.5	11.3	2.60	1.87	9.04
MAX	140	53	71	36	395	512	155	57	62	4.8	3.9	83
MIN	9.5	13	10	8.2	6.1	63	20	7.8	4.2	1.0	.40	.32
CFSM	1.63	1.16	1.27	.78	1.94	6.39	3.11	1.34	.59	.14	.10	.47
IN.	1.89	1.30	1.46	.90	2.02	7.36	3.46	1.54	.66	.16	.11	.53

CAL YR 1976 TOTAL 11593.20 MEAN 31.7 MAX 280 MIN 2.5 CFSM 1.66 IN 22.58
WTR YR 1977 TOTAL 10980.14 MEAN 30.1 MAX 512 MIN .32 CFSM 1.58 IN 21.38

01386000 WEST BROOK NEAR WANAQUE, NJ

LOCATION.--Lat 41°04'16", long 74°18'45", Passaic County, Hydrologic Unit 02030103, on right bank just upstream from Wanaque Reservoir, 0.3 mi (0.5 km) downstream from Burnt Meadow Brook, and 2.5 mi (4.0 km) northwest of Wanaque.

DRAINAGE AREA.--11.8 mi^3 (30.6 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1934 to current year. Monthly discharge only for October to December 1934, published in WSP 1302.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 326.79 ft (99.606 m) NGVD (levels from New Jersey Geological Survey bench mark).

REMARKS.--Discharge records fair. Records given herein include flow over spillway and through ports in dam or through waste gate in dam. Flow slightly regulated by several lakes above station.

COOPERATION.--Gage-height record collected in cooperation with North Jersey Water Supply Commission.

AVERAGE DISCHARGE.--43 years, 23.9 ft^3/s (0.677 m^3/s), 27.50 in/yr (698 mm/yr).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft^3/s (11.3 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 25	0200	528	15.0	3.19	0.972
Mar. 22	1930	*740	21.0	4.06	1.237

Minimum daily discharge, 0.20 ft^3/s (0.006 m^3/s) Aug. 30, Sept. 9.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,900 ft^3/s (53.8 m^3/s) Mar. 30, 1951 (gage height, 6.6 ft or 2.01 m, from floodmark), from rating curve extended above 630 ft^3/s (17.8 m^3/s); no flow part of day in most years just after waste gate was closed and water was below ports.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	40	5.7	6.6	3.2	44	26	19	7.4	2.7	.90	.65
2	11	28	5.7	6.6	2.2	34	37	18	7.4	2.7	1.3	.65
3	25	25	5.2	6.6	2.2	28	87	16	5.7	2.2	2.2	.90
4	21	23	4.8	6.6	2.2	90	51	14	4.4	2.2	.90	.65
5	16	20	4.4	6.2	1.7	177	157	29	4.0	2.2	.40	.65
6	15	18	4.4	5.7	1.7	76	103	42	4.4	1.7	.40	.65
7	14	16	90	6.2	3.6	52	64	76	6.2	2.7	.90	.65
8	12	14	67	5.7	3.2	39	52	39	4.8	3.2	.65	.40
9	40	13	56	6.2	1.3	37	42	42	23	2.7	.40	.20
10	53	13	24	7.9	1.3	34	35	43	64	2.2	.40	.65
11	19	12	21	9.4	1.7	31	31	30	21	1.7	.65	.40
12	12	10	23	7.9	4.0	28	27	24	11	2.2	.40	.40
13	9.4	11	20	7.0	7.4	103	23	22	7.4	2.7	.65	.65
14	7.9	10	17	6.6	9.4	126	22	19	6.6	1.7	1.3	.90
15	7.4	10	13	6.6	7.9	70	19	17	6.2	1.7	3.2	1.3
16	7.4	10	13	5.7	6.2	56	18	15	5.2	1.3	.65	3.2
17	7.9	10	13	8.4	5.2	44	16	13	4.8	1.7	4.0	4.8
18	7.9	10	13	11	4.4	44	16	11	4.4	1.3	2.2	1.3
19	8.0	8.4	13	6.6	4.4	46	14	11	4.0	1.3	.65	2.7
20	40	7.0	13	4.0	4.4	40	13	10	3.6	1.3	.40	2.2
21	150	7.0	16	2.7	4.4	39	13	9.4	4.4	1.2	.40	2.2
22	64	6.6	13	2.7	5.2	320	13	8.4	3.6	1.1	2.2	1.3
23	38	6.6	10	2.2	5.2	316	14	7.9	3.2	1.1	.90	1.3
24	31	6.2	8.4	2.2	43	116	29	7.4	2.7	1.0	.65	7.4
25	34	6.2	7.9	2.2	342	76	57	6.2	3.2	1.0	.65	60
26	56	6.2	8.4	2.2	103	60	34	6.2	3.6	.90	.40	116
27	39	6.2	7.9	2.2	69	48	43	5.2	3.2	.40	.40	94
28	30	6.2	11	3.6	66	42	31	4.8	2.7	.40	.40	29
29	26	8.4	8.4	7.4	---	40	24	4.4	3.6	.40	.40	17
30	23	7.4	7.0	11	---	33	20	4.8	3.2	.65	.20	11
31	48	---	7.0	7.0	---	30	---	4.8	---	.65	.40	---
TOTAL	882.9	375.4	531.2	182.9	715.4	2319	1131	579.5	238.9	50.20	29.55	363.10
MEAN	28.5	12.5	17.1	5.90	25.6	74.8	37.7	18.7	7.96	1.62	.95	12.1
MAX	150	40	90	11	342	320	157	76	64	3.2	4.0	116
MIN	7.4	6.2	4.4	2.2	1.3	28	13	4.4	2.7	.40	.20	.20
CFSM	2.42	1.06	1.45	.50	2.17	6.34	3.20	1.59	.68	.14	.08	1.03
IN.	2.78	1.18	1.67	.58	2.26	7.31	3.57	1.83	.75	.16	.09	1.14

CAL YR 1976 TOTAL 8499.80 MEAN 23.2 MAX 269 MIN 1.0 CFSM 1.97 IN 26.79
WTR YR 1977 TOTAL 7309.05 MEAN 20.3 MAX 342 MIN .20 CFSM 1.72 IN 23.32

01387000 WANAQUE RIVER AT WANAQUE, NJ

LOCATION.--Lat 41°02'33", long 74°17'36", Passaic County, Hydrologic Unit 02030103, on left bank 750 ft (229 m) downstream from Raymond Dam in Wanaque, and 50 ft (15 m) upstream from bridge on State Highway 511.

DRAINAGE AREA.--90.4 mi^2 (234.1 km^2), considered as 94 mi^2 (243 km^2) Oct. 1, 1928, to Sept. 30, 1934.

PERIOD OF RECORD.--
WATER DISCHARGE: December 1903 to December 1905 (gage heights only), September 1912 to April 1915, May 1919 to current year.
CHEMICAL ANALYSES: Water years 1963 to current year.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: September 1912 to April 1, 1915, May 1919 to current year.
WATER TEMPERATURES: October 1963 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 210.00 ft (64.008 m) NGVD (levels from New Jersey Geological Survey bench mark). Dec. 16, 1903, to Dec. 31, 1905, nonrecording gage on highway bridge at site 50 ft (15 m) downstream at different datum. Sept. 15, 1912, to Apr. 1, 1922, nonrecording gage at site 200 ft (61 m) downstream from present concrete control at different datum. Apr. 1, 1922 to Mar. 14, 1931, water-stage recorder at site 400 ft (122 m) downstream from present concrete control at present datum.

REMARKS.--Discharge records good. Flow regulated by Greenwood Lake (see Passaic River Basin, reservoirs in) 11 mi (17.7 km) above station, and since 1928 by Wanaque Reservoir (see Passaic River Basin, reservoirs in). North Jersey Water Supply Commission diverts water for municipal supply from Wanaque Reservoir. Water is diverted to Wanaque Reservoir from Post Brook at Wanaque and from Ramapo River at Pompton Lakes (see Passaic River Basin, diversions).

COOPERATION.--Gage-height record collected in cooperation with North Jersey District Water Supply Commission. Once daily water temperature records provided by North Jersey District Water Supply Commission. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--60 years, (1912-14, 1919-77), 78.3 ft^3/s (2.217 m^3/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,090 ft^3/s (59.2 m^3/s) Mar. 23, gage height, 6.30 ft (1.920 m); minimum, 8.2 ft^3/s (0.23 m^3/s) Feb. 23, 24, gage height 1.13 ft (0.344 m).

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER DISCHARGE: Maximum discharge, 8,470 ft^3/s (240 m^3/s) Mar. 31, 1951 (gage height, 9.12 ft or 2.780 m) from rating curve extended above 4,300 ft^3/s (122 m^3/s); minimum daily, 0.5 ft^3/s (0.014 m^3/s) Dec. 11, 12, 14-23, 1949, Sept. 11, 12, 1965.
WATER TEMPERATURES: Maximum daily, 24.5°C Aug. 19, 20, 1965: minimum daily, 1.0°C Jan. 31, 1966, Feb. 15, 1974.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	19	19	18	24	9.3	163	23	20	21	21	18
2	37	19	19	18	19	9.8	146	23	19	20	21	18
3	38	41	18	18	18	9.3	405	28	19	20	21	18
4	37	52	18	18	19	12	325	32	19	20	20	18
5	37	22	18	18	18	10	570	25	19	31	20	18
6	37	20	18	18	18	9.3	767	27	25	21	21	18
7	37	20	19	18	22	9.3	557	60	19	21	21	18
8	36	20	19	18	21	8.7	457	58	19	21	20	18
9	37	20	18	18	19	9.3	302	95	22	20	20	18
10	35	19	18	18	19	9.3	236	130	20	20	21	18
11	35	19	17	18	19	9.3	201	90	19	27	30	18
12	36	19	17	18	19	8.7	175	70	19	21	20	18
13	37	19	19	18	19	11	149	85	30	21	21	18
14	38	19	19	18	20	10	151	44	19	21	21	18
15	37	19	20	18	19	9.8	74	27	19	21	19	18
16	28	19	18	18	19	9.8	54	25	21	20	19	18
17	28	19	18	18	19	11	32	23	22	20	21	17
18	27	19	18	18	18	13	29	22	21	21	19	17
19	25	19	18	18	18	16	26	22	21	21	19	17
20	25	19	18	18	18	15	22	22	30	21	19	18
21	22	19	18	18	18	16	22	22	19	21	19	18
22	19	19	18	18	19	201	23	22	19	21	20	15
23	19	18	18	18	13	1860	22	22	19	19	20	12
24	19	18	18	18	13	1500	23	24	20	19	19	13
25	19	18	18	18	14	980	24	22	20	20	19	14
26	20	18	18	21	9.3	557	24	21	19	21	19	15
27	19	18	18	21	8.7	409	24	20	33	21	19	11
28	19	18	18	18	9.3	331	41	19	21	21	18	11
29	19	19	18	18	---	308	41	20	21	21	18	11
30	19	19	18	18	---	251	24	20	21	21	18	11
31	20	---	18	18	---	236	---	33	---	20	18	---
TOTAL	899	626	564	564	489.3	6858.9	5109	1176	634	654	621	488
MEAN	29.0	20.9	18.2	18.2	17.5	221	170	37.9	21.1	21.1	20.0	16.3
MAX	38	52	20	21	24	1860	767	130	33	31	30	18
MIN	19	18	17	18	8.7	8.7	22	19	19	19	18	11

CAL YR 1976 TOTAL 23766.0 MEAN 64.9 MAX 1380 MIN 17
WTR YR 1977 TOTAL 18683.2 MEAN 51.2 MAX 1860 MIN 8.7

01387000 WANAQUE RIVER AT WANAQUE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)
NOV 10...	1330	20	102	8.0	9.5	1	11.2	4.1	50	--
FEB 03...	1015	19	102	6.8	3.0	1	13.6	.8	828	<2
APR 12...	1210	188	97	7.2	8.0	1	11.3	1.1	816	<2
MAY 25...	0845	24	99	7.4	13.5	1	10.1	1.2	110	23
JUN 15...	1000	21	98	7.4	16.5	1	9.8	.6	180	11
AUG 01...	1110	21	103	7.7	20.0	1	9.0	1.2	--	31
17...	1120	35	99	7.2	15.0	1	9.8	1.1	--	>2400

DATE	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
NOV 10...	826	--	33	7	8.9	2.7	6.0	1.0	32
FEB 03...	<2	2	32	17	8.4	2.6	5.8	.8	18
APR 12...	--	<2	36	18	8.5	3.7	6.0	.9	22
MAY 25...	22	2	29	13	7.8	2.4	5.5	.8	20
JUN 15...	120	5	30	13	7.7	2.5	5.5	.8	21
AUG 01...	--	12	29	13	7.8	2.4	5.9	.8	20
17...	--	>2400	30	14	7.8	2.5	5.5	.7	20

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV 10...	0	26	.5	--	12	8.8	--	46	7
FEB 03...	0	15	4.6	--	14	8.7	--	67	0
APR 12...	0	18	2.2	--	12	9.9	--	78	1
MAY 25...	0	16	1.3	.0	12	9.5	2.9	62	0
JUN 15...	0	17	1.3	--	12	9.3	--	--	4
AUG 01...	0	16	.6	--	12	9.2	--	47	4
17...	0	16	2.0	--	11	9.0	--	62	0

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 10...	--	--	--	--	1.4	--	.02	--	2.0
FEB 03...	--	--	--	--	1.4	--	.01	--	9.0
APR 12...	--	--	.02	.71	.73	.91	.01	--	--
MAY 25...	--	--	--	--	1.4	--	.01	--	4.1
JUN 15...	--	--	--	--	.80	--	.01	--	5.5
AUG 01...	.07	.00	.02	.12	.14	.21	.01	.01	4.1
17...	.14	.00	.04	.26	.30	.44	.03	.01	4.5

01387000 WANAQUE RIVER AT WANAQUE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY								
25...	0845	40	1	7	0	0	2	2

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY								
25...	40	5	90	.0	4	0	20	0

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.0	11.0	6.5	---	2.0	3.5	6.0	---	13.0	20.0	21.0	17.0
2	---	---	6.5	---	2.5	4.0	---	9.0	13.0	---	22.0	17.5
3	---	13.0	6.0	2.0	2.0	4.0	---	9.0	14.0	---	22.0	---
4	17.0	10.0	---	2.0	2.5	4.0	6.5	9.0	---	---	21.0	---
5	19.0	9.0	---	2.0	---	---	6.0	9.0	---	22.0	22.0	---
6	18.0	---	5.5	2.0	---	---	6.0	10.0	13.0	22.5	---	17.0
7	19.0	---	6.5	2.0	2.5	5.0	7.0	---	13.0	23.0	---	17.5
8	18.5	10.0	5.0	---	2.5	5.0	6.0	---	13.5	21.0	22.0	17.0
9	---	10.5	4.5	---	2.5	5.0	---	10.0	16.0	---	22.0	17.0
10	---	10.0	5.0	2.0	2.5	5.0	---	10.0	16.0	---	22.0	---
11	---	---	---	2.0	---	5.0	6.0	10.0	---	24.0	16.0	---
12	17.5	10.0	---	2.0	---	---	6.0	10.0	---	24.0	16.0	17.5
13	17.5	---	4.5	2.0	---	---	7.0	10.0	16.0	24.0	---	18.0
14	17.0	---	4.0	2.5	2.5	5.0	7.5	---	16.5	23.0	---	16.0
15	15.0	9.0	4.0	---	2.5	6.0	7.0	---	16.0	24.0	15.0	17.0
16	---	9.0	4.0	---	---	5.0	---	10.0	17.0	---	21.0	17.0
17	---	8.5	5.0	2.0	3.0	5.0	---	11.5	17.0	---	15.0	---
18	15.0	8.5	---	2.0	3.0	5.5	8.0	12.0	---	24.0	15.0	---
19	16.0	8.5	---	2.0	---	---	9.0	11.0	---	24.0	16.0	16.0
20	15.5	---	4.0	2.0	---	---	8.0	11.0	18.0	24.0	---	17.5
21	15.5	---	5.0	2.5	---	5.0	8.0	---	17.5	25.0	---	17.5
22	15.0	8.0	5.0	---	4.0	5.0	8.0	---	18.0	24.5	18.0	18.0
23	---	7.5	4.0	---	4.0	5.0	---	12.0	18.0	---	17.5	16.0
24	---	7.0	---	2.0	3.0	5.0	---	12.0	17.5	---	18.0	---
25	14.0	---	---	2.0	4.0	4.0	8.0	12.0	---	22.5	18.0	---
26	15.0	---	---	2.5	---	---	9.0	13.5	---	21.0	17.0	16.5
27	13.0	---	2.0	2.0	---	---	8.0	13.5	19.0	21.0	---	16.0
28	13.0	---	2.5	2.0	4.0	5.0	8.5	---	19.0	21.0	---	17.0
29	13.0	7.5	2.5	---	---	5.0	8.0	---	19.0	21.0	18.0	17.0
30	---	7.0	2.0	---	---	5.5	---	---	19.5	---	18.0	18.0
31	---	---	---	2.0	---	5.0	---	13.0	---	---	17.0	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

01387450 MAHWAH RIVER NEAR SUFFERN, NY

LOCATION.--Lat 41°08'27", long 74°07'01", Rockland County, NY, Hydrologic Unit 02030103, on left bank 13 ft (4 m) upstream from bridge on U.S. Highway 202, 2.5 mi (4.0 km) northeast of Suffern, and 4.8 mi (7.7 km) upstream from mouth.

DRAINAGE AREA.--12.3 mi^2 (31.9 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: August 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 321.57 ft (98.015 m) NGVD. Prior to Nov. 18, 1976, water-stage recorder at site on right bank 13 ft (4 m) downstream, at present datum.

REMARKS.--Discharge records fair. Occasional regulation from unknown source.

AVERAGE DISCHARGE.--19 years, 23.9 ft^3/s (0.677 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft^3/s (5.7 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 25	0245	*668	18.9	6.01	1.832	Mar. 22	2200	609	17.2	5.82	1.774
Mar. 5	0100	280	7.93	4.45	1.356	Sept. 26	2230	324	9.18	4.68	1.426
Mar. 14	0215	260	7.36	4.34	1.322						

Minimum discharge, 0.73 ft^3/s (0.021 m^3/s) July 31, Aug. 2, 3, gage height 1.27 ft (0.387 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,650 ft^3/s (46.7 m^3/s) May 29, 1968, (gage height, 7.78 ft or 2.371 m), from rating curve extended above 850 ft^3/s (24.1 m^3/s) on basis of contracted-opening measurement of peak flow; minimum, 0.05 ft^3/s (0.001 m^3/s) Oct. 20, 21, 1970, result of temporary pumping from gage pool.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	39	7.1	7.1	4.0	52	35	22	12	1.6	.78	1.2
2	5.2	29	6.7	7.1	4.0	41	42	22	11	1.5	.83	1.1
3	18	26	6.1	6.7	3.8	34	86	21	5.8	1.4	.89	1.1
4	14	24	5.5	6.7	3.8	76	56	19	5.0	1.3	1.3	1.1
5	8.2	22	5.5	6.7	4.0	180	124	35	4.2	1.3	1.3	1.1
6	6.7	21	5.5	6.1	4.2	88	94	32	4.2	1.2	1.1	1.1
7	6.1	20	57	6.0	4.0	64	68	36	5.8	1.2	1.1	1.0
8	5.8	18	50	5.8	3.8	52	58	28	4.5	1.4	1.0	1.0
9	48	17	27	6.0	3.6	42	48	36	31	1.4	.94	1.0
10	38	17	22	7.0	3.6	37	42	49	62	1.2	2.7	1.0
11	24	16	21	8.0	5.0	33	38	36	26	1.1	5.2	5.0
12	19	15	21	7.0	9.4	30	35	31	17	1.3	2.0	1.6
13	17	14	20	6.4	10	110	32	26	12	1.6	1.6	1.0
14	13	13	17	6.2	6.0	182	30	24	9.5	1.3	1.8	1.0
15	11	12	15	6.0	5.6	94	27	23	7.8	1.1	2.7	1.0
16	8.6	12	15	5.8	5.4	69	25	20	6.7	1.6	1.3	4.5
17	7.8	11	14	5.6	5.2	55	23	18	5.5	4.5	1.3	4.5
18	7.1	11	13	5.6	5.0	52	22	17	5.0	1.7	10	2.6
19	6.7	11	13	5.4	5.0	55	21	15	4.5	1.4	3.0	2.5
20	20	10	14	5.2	4.9	48	20	14	4.7	1.3	1.7	2.7
21	104	9.5	14	5.0	4.8	43	19	12	5.5	1.2	1.4	3.2
22	46	10	11	4.8	6.0	211	18	11	4.0	1.1	1.3	2.2
23	30	9.1	10	4.6	6.7	306	18	9.5	3.8	.94	2.8	2.1
24	26	8.6	9.5	4.5	31	129	27	8.6	3.4	.89	1.4	16
25	31	8.2	8.6	4.5	359	84	46	8.6	3.4	.94	1.3	55
26	53	7.8	10	4.5	123	69	30	6.7	3.6	1.0	2.5	138
27	36	7.8	9.1	4.4	77	58	37	5.8	2.0	.94	1.5	174
28	29	7.1	8.6	4.3	68	56	30	5.5	2.1	.83	1.3	64
29	25	9.5	8.6	4.2	---	56	26	5.2	2.0	.83	1.2	34
30	23	9.1	7.8	4.1	---	46	24	5.5	2.6	.83	1.2	24
31	47	---	7.5	4.0	---	41	---	5.0	---	.78	1.2	---
TOTAL	739.2	444.7	460.1	175.3	775.8	2493	1201	607.4	276.6	40.68	59.64	549.6
MEAN	23.8	14.8	14.8	5.65	27.7	80.4	40.0	19.6	9.22	1.31	1.92	18.3
MAX	104	39	57	8.0	359	306	124	49	62	4.5	10	174
MIN	5.0	7.1	5.5	4.0	3.6	30	18	5.0	2.0	.78	.78	1.0

CAL YR 1976 TOTAL 7758.92 MEAN 21.2 MAX 244 MIN .52
WTR YR 1977 TOTAL 7823.02 MEAN 21.4 MAX 359 MIN .78

01387500 RAMAPO RIVER NEAR MAHWAH, NJ

LOCATION.--Lat 41°05'51", long 74°09'48", Bergen County, Hydrologic Unit 02030103, on left bank 350 ft (107 m) downstream from State Highway 17, 0.6 mi (1.0 km) downstream from Mahwah River, and 1.0 mi (1.6 km) west of Mahwah.

DRAINAGE AREA.--118 mi² (306 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1902 to December 1906, September 1922 to current year (October 1902 to February 1905 monthly discharge only, published in WSP 1302). Figures of daily discharge Feb. 10, 1903 to Dec. 31, 1904, published in WSP 97, 125, are unreliable and should not be used.
CHEMICAL ANALYSES: Water years 1963 to current year.
SEDIMENT ANALYSES: Water years 1964-65.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: September 1922 to current year.
SUSPENDED-SEDIMENT DISCHARGE: February 1964 to June 1965.

REVISED DISCHARGE RECORDS.--WSP 781: 1904(M). WSP 1031: 1938, 1940. WSP 1552: 1923(M), 1924, 1925-26(M), 1927-28, 1933, 1937. WRD-NJ 1971: 1968(M).

GAGE.--Water-stage recorder. Datum of gage is 253.10 ft (77.145 m) NGVD. Prior to Dec. 31, 1906, nonrecording gage on former bridge at site 250 ft (76 m) downstream at different datum. Sept. 1, 1922 to Dec. 23, 1936, water-stage recorder just below former bridge at present datum.

REMARKS.--Discharge records good. Diurnal fluctuations occasionally at low flow caused by powerplants above station.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--59 years, 228 ft³/s (6.457 m³/s), 26.24 in/yr (666 mm/yr).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,400 ft³/s (39.6 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 25	0300	3030	85.8	8.90	2.713
Mar. 14	0445	1530	43.3	7.37	2.246
Mar. 23	0445	*4100	116	9.65	2.941
Sept. 26	2145	1530	43.3	7.36	2.243

Minimum discharge, 12 ft³/s (0.34 m³/s) Sept. 11, gage height, 2.03 ft (0.619 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 12,400 ft³/s (352 m³/s) Oct. 9, 1903, (gage height, 11.0 ft or 3.35 m, from graph based on gage readings, site and datum then in use) from rating curve extended above 1,400 ft³/s (39.6 m³/s); minimum, 7 ft³/s (0.20 m³/s) Dec. 16, 1930, Sept. 12, 1932; minimum daily, 8 ft³/s (0.23 m³/s) Aug. 25, 1929, Sept. 5, 12, 1932.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 10 SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	375	78	77	38	578	392	215	99	36	16	20
2	91	280	73	79	36	485	407	199	99	32	16	24
3	139	233	66	78	34	430	790	191	69	28	25	17
4	167	213	63	78	37	599	651	173	57	26	25	14
5	121	197	62	75	42	1300	1040	325	50	27	31	15
6	107	189	58	72	38	843	1060	370	49	26	27	14
7	97	169	330	74	35	593	776	440	60	26	22	15
8	92	151	551	69	39	480	627	338	58	33	20	13
9	257	140	282	71	39	407	516	402	195	34	19	13
10	390	134	209	96	42	360	447	504	531	27	36	15
11	203	128	183	101	49	322	402	422	325	23	35	12
12	138	121	167	85	65	287	355	342	179	30	28	13
13	120	115	151	72	95	674	317	287	125	29	28	13
14	111	109	127	69	117	1480	282	243	101	27	30	15
15	99	103	125	64	108	1030	253	211	87	24	45	15
16	91	99	131	60	87	701	237	185	73	34	26	36
17	81	97	133	58	73	542	213	169	63	65	48	40
18	75	93	128	56	67	495	195	155	58	58	40	27
19	71	90	119	54	65	510	181	143	54	45	29	31
20	185	87	116	52	62	455	169	133	55	35	22	37
21	998	83	132	54	68	410	160	121	53	28	19	26
22	662	79	111	56	62	1400	152	109	47	23	38	23
23	427	77	110	58	77	3630	155	99	47	19	28	24
24	347	74	101	60	295	1970	241	92	46	17	24	69
25	372	73	91	62	2660	1060	442	85	48	20	21	342
26	492	72	97	60	1580	793	347	77	46	20	19	727
27	440	72	93	56	818	648	380	68	43	19	19	888
28	347	73	92	50	701	582	340	62	41	19	17	387
29	297	87	92	44	---	606	275	56	40	18	19	217
30	209	92	83	42	---	525	239	58	37	17	19	146
31	347	---	83	40	---	456	---	54	---	15	22	---
TOTAL	7688	3905	4237	2022	7429	24651	12041	6328	2835	880	813	3248
MEAN	248	130	137	65.2	265	795	401	204	94.5	28.4	26.2	108
MAX	998	375	551	101	2660	3630	1060	504	531	65	48	888
MIN	71	72	58	40	34	287	152	54	37	15	16	12
CFSM	2.10	1.10	1.16	.55	2.25	6.74	3.40	1.73	.80	.24	.22	.92
IN.	2.42	1.23	1.34	.64	2.34	7.77	3.80	1.99	.89	.28	.26	1.02

CAL YR 1976 TOTAL 77719 MEAN 212 MAX 2490 MIN 26 CFSM 1.80 IN 24.50
WTR YR 1977 TOTAL 76077 MEAN 208 MAX 3630 MIN 12 CFSM 1.76 IN 23.98

01387500 RAMAPO RIVER NEAR MAHWAH, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)
NOV												
10...	1220	137	317	7.5	5.0	2	13.2	3.0	B130	--	B80	--
FEB												
02...	1315	E36	444	7.7	1.0	4	15.2	1.3	B190	<2	B4	<2
APR												
12...	1015	360	232	7.5	9.5	2	11.8	1.6	B3000	70	B830	350
MAY												
25...	0650	88	342	7.5	20.0	5	6.6	1.6	B2	<20	B4	<2
JUN												
15...	0805	92	292	7.5	18.5	1	8.0	.8	--	<20	B10	<2
AUG												
01...	1005	16	485	7.5	22.0	5	4.8	8.7	--	540	--	350
17...	1005	22	444	7.4	21.0	1	5.5	7.7	--	>2400	--	240

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV												
10...	78	25	21	6.1	28	1.3	65	0	53	3.3	43	33
FEB												
02...	100	24	28	8.0	40	1.7	93	0	76	3.0	38	64
APR												
12...	78	33	21	6.1	17	1.1	55	0	45	2.8	17	32
MAY												
25...	100	34	28	8.0	24	1.5	80	0	66	4.0	19	46
JUN												
15...	86	29	24	6.4	22	1.3	70	0	57	3.5	18	11
AUG												
01...	130	42	36	10	38	2.6	107	0	88	5.4	27	72
17...	130	42	36	9.5	35	2.6	107	0	88	6.8	26	63

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV											
10...	175	9	--	--	--	--	1.1	--	.09	--	2.8
FEB											
02...	240	0	--	--	--	--	2.2	--	.26	--	5.5
APR											
12...	160	2	--	--	--	--	1.1	--	.04	--	1.8
MAY											
25...	197	0	--	--	--	--	1.4	--	.07	--	7.2
JUN											
15...	173	10	--	--	--	--	1.1	--	.05	--	5.4
AUG											
01...	261	15	1.2	.30	1.5	.80	2.3	3.8	.55	.45	7.0
17...	253	12	1.4	.14	.68	.72	1.4	2.9	.36	.25	5.6

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ

LOCATION.--Lat 40°59'33", long 74°16'44", Passaic County, Hydrologic Unit 02030103, on right end of dam at pumping station in Pompton Lakes and 2.0 mi (3.2 km) upstream from mouth.

DRAINAGE AREA.--160 mi² (414 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1921 to current year.

REVISED DISCHARGE RECORDS.--WSP 1552: 1922(M), 1924-25, 1929-31(M), 1934-35(M). WRD-NJ 1970: 1968-69.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 201.08 ft (61.289 m) NGVD.

REMARKS.--Discharge records good. Diversion by North Jersey Water Supply Commission to Wanaque Reservoir, since December 1953, for municipal supply (records given herein). Slight regulation by Pompton Lake, capacity, 300,000,000 gal (1.136 hm³).

AVERAGE DISCHARGE.--56 years, 299 ft³/s (8.468 m³/s), 25.37 in/yr (644 mm/yr), adjusted for diversion since Dec. 1, 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,600 ft³/s (45.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 25	1230	3170	89.8	1.95	0.591	Mar. 14	1230	1790	50.7	1.35	0.411
Mar. 5	1145	1810	51.3	1.36	0.415	Mar. 23	0930	*5290	150	2.63	0.802

Minimum discharge, 22 ft³/s (0.62 m³/s) Aug. 9, 10, Sept. 4, 5, 6.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,300 ft³/s (348 m³/s) Mar. 12, 1936 (gage height, 3.56 ft or 1.085 m), from rating curve extended above 7,000 ft³/s (198 m³/s) on basis of theoretical weir formula; maximum gage height, 4.40 ft (1.341 m) Oct. 16, 1955; practically no flow for several days in October, November 1922, August, September 1923, July 1927, and October 20, 1933.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	168	364	110	90	58	668	518	305	124	54	31	28
2	148	390	102	92	56	518	518	284	230	49	28	28
3	178	187	88	91	54	417	982	284	150	44	31	28
4	229	139	91	92	52	668	915	264	100	39	44	25
5	121	120	90	92	50	1700	1340	370	98	39	44	22
6	65	252	83	88	50	1210	1480	479	82	39	49	28
7	66	248	288	96	52	772	1110	612	120	44	44	39
8	66	231	659	83	54	557	865	505	100	49	31	39
9	265	212	408	90	56	429	712	492	315	54	28	39
10	497	201	292	117	58	348	612	598	598	44	44	39
11	332	194	243	146	62	294	544	571	442	39	64	39
12	154	177	223	119	78	244	479	454	264	49	49	35
13	66	167	211	101	116	571	429	382	180	54	44	35
14	67	157	165	92	157	1660	382	326	145	49	44	35
15	85	148	169	88	143	1360	348	284	131	49	64	35
16	120	142	171	84	71	865	326	264	110	49	49	49
17	109	137	180	80	78	626	315	225	96	76	110	117
18	100	138	171	76	70	505	274	207	89	76	96	70
19	95	135	158	74	66	531	244	198	89	70	59	70
20	160	129	144	72	62	479	235	189	82	59	44	64
21	1080	121	159	70	60	454	216	180	110	44	35	60
22	771	116	137	91	60	1480	207	162	82	49	59	45
23	417	114	138	84	60	4810	216	145	70	39	54	39
24	290	111	126	86	127	3030	284	138	70	35	44	85
25	305	106	112	72	2760	1580	571	131	76	35	44	445
26	448	103	121	70	2190	1090	505	117	89	35	35	691
27	404	103	117	68	1140	865	492	103	64	31	31	1070
28	290	104	116	66	849	757	466	96	64	35	28	497
29	228	122	117	64	---	772	394	82	64	39	28	134
30	154	127	110	62	---	712	348	82	54	44	28	44
31	281	---	100	60	---	612	---	76	---	39	28	---
TOTAL	7759	4995	5399	2656	8689	30584	16327	8605	4280	1450	1411	3954
MEAN	250	167	174	85.7	310	987	544	278	143	46.8	45.5	132
MAX	1080	390	659	146	2760	4810	1480	612	598	76	110	1070
MIN	65	103	83	60	50	244	207	76	54	31	28	22
(†)	73.6	21.5	0	0	31.1	111	0	0	0	0	0	10.7
MEAN‡	324	188	174	85.7	341	1098	544	278	141	42.1	43.0	143
CFSM‡	2.02	1.18	1.09	0.54	2.13	6.86	3.40	1.74	0.88	0.26	0.27	0.89
IN‡	2.33	1.31	1.25	0.62	2.22	7.91	3.80	2.00	0.98	0.30	0.31	0.99

CAL YR 1976 TOTAL 104719 MEAN 286 MAX 2940 MIN 40 MEAN‡ 294 CFSM‡ 1.84 IN‡ 25.00
WTR YR 1977 TOTAL 96109 MEAN 263 MAX 4810 MIN 22 MEAN‡ 284 CFSM‡ 1.78 IN‡ 24.02

† Diversion, in cubic feet per second, at station to Wanaque Reservoir for municipal supply. Records of diversion furnished by North Jersey District Water Supply Commission.

‡ Adjusted for diversion.

01388500 POMPTON RIVER AT POMPTON PLAINS, NJ

LOCATION.--Lat 40°58'09", long 74°16'56", Passaic County, Hydrologic Unit 02030103, 800 ft (240 m) below confluence of Pequannock and Ramapo Rivers, 100 ft (30 m) upstream from Jackson Avenue Bridge, and 0.7 mi (1.1 km) east of Pompton Plains.

DRAINAGE AREA.--355 mi^2 (919 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: March 1903 to December 1904, May 1940 to current year. Monthly discharge only or some periods, published in WSP 1302.

REVISED DISCHARGE RECORDS.--WSP 1202: 1945(M).

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 160.00 ft (48.768 m) NGVD. March 1903 to December 1904, nonrecording gage on main spillway of dam 2,000 ft (610 m) upstream at different datum. May 1940 to September 1964 two water-stage recorders, each above a concrete dam about 2,000 ft (610 m) upstream at datum 14.46 ft (4.407 m) higher.

REMARKS.--Discharge records good. No pumpage to or release from Point View Reservoir during the year. Water diverted from reservoirs on Pequannock and Wanaque Rivers for municipal supply (see Passaic River Basin, diversions). Flow regulated by Canistear, Oak Ridge, Clinton, Charlotteburg and Echo Lake Reservoirs on Pequannock River and by Greenwood Lake on Wanaque River (see Passaic River Basin, reservoirs in). Some diurnal fluctuations at low flow caused by powerplant on Wanaque River.

COOPERATION.--Gage-height record collected in cooperation with Passaic Valley Water Commission.

AVERAGE DISCHARGE.--38 years, (1903-4, 1940-77), 475 ft^3/s (13.45 m^3/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,200 ft^3/s (90.6 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 25	1400	3320	94.0	13.77	4.197
Mar. 23	Unknown	*9000	255	Unknown	

Minimum daily discharge, 52 ft^3/s (1.47 m^3/s) Sept. 14, 15.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 28,340 ft^3/s (803 m^3/s) Oct. 10, 1903 (gage height, 14.3 ft or 4.36 m) site and datum then in use, by computation of peak flow over dam; no flow Aug.18-20, 1904.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	196	414	163	138	118	585	615	357	194	90	59	59
2	179	408	125	149	117	448	1380	342	238	89	58	64
3	203	296	141	147	116	390	1090	334	164	81	65	60
4	240	274	143	147	116	612	1100	322	137	78	72	57
5	157	227	142	142	117	1610	1340	402	118	85	69	56
6	113	300	134	137	113	1070	2020	482	120	78	68	62
7	114	298	399	146	115	679	1420	629	131	89	82	62
8	115	286	621	136	101	517	1130	525	121	94	68	64
9	310	268	417	138	114	423	976	534	285	95	65	64
10	414	264	343	179	116	375	892	643	612	85	105	64
11	306	252	306	209	120	337	789	612	457	81	108	64
12	194	236	292	168	134	308	734	529	324	97	83	64
13	124	221	278	148	173	372	677	478	267	97	69	54
14	120	218	234	154	218	918	643	384	211	83	85	52
15	127	206	244	156	198	1140	551	342	190	75	97	52
16	138	198	238	145	132	702	508	317	161	72	79	63
17	143	194	244	127	130	522	485	300	148	96	209	154
18	149	191	238	135	126	700	454	283	139	104	151	85
19	143	187	227	136	135	620	410	269	152	95	94	98
20	256	179	213	139	141	550	360	256	178	55	78	91
21	1200	169	232	137	140	430	320	230	198	80	68	100
22	711	164	200	131	134	1130	280	212	131	67	112	86
23	427	163	203	125	123	7820	298	191	116	61	91	70
24	340	158	182	128	201	5150	355	185	113	59	79	100
25	352	155	165	131	3180	2740	526	180	134	59	87	780
26	483	154	178	134	2030	1590	503	164	145	63	70	1200
27	430	151	170	133	912	1130	512	146	115	55	65	1900
28	348	151	164	125	697	882	489	135	115	55	64	1000
29	304	179	168	122	---	930	440	124	110	57	62	350
30	252	183	146	115	---	790	388	125	110	57	61	111
31	378	---	150	115	---	675	---	134	---	57	60	---
TOTAL	8966	6744	7100	4372	10067	36145	21685	10166	5634	2389	2603	7086
MEAN	289	225	229	141	360	1166	723	328	188	77.1	84.0	236
MAX	1200	414	621	209	3180	7820	2020	643	612	104	209	1900
MIN	113	151	125	115	101	308	280	124	110	55	58	52

CAL YR 1976 TOTAL 160331 MEAN 438 MAX 6310 MIN 85
WTR YR 1977 TOTAL 122957 MEAN 337 MAX 7820 MIN 52

NOTE.--No gage-height record Mar. 18-Apr. 4, and Sept. 13-30.

01389000 POMPTON RIVER AT TWO BRIDGES, NJ

LOCATION.--Lat 40°53'52", long 74°16'22", Passaic County, Hydrologic Unit 02030103, at bridge on Two Bridges Road just upstream from mouth, and 0.3 mi (0.5 km) northeast of Two Bridges.

DRAINAGE AREA.--380 mi² (984 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1963 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1969 to September 1974.
pH: June 1969 to September 1974.
WATER TEMPERATURES: October 1962 to September 1974.
DISSOLVED OXYGEN: June 1969 to September 1974.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 11...	1030	250	6.8	4.0	2	9.7	2.3	160	3500	46	23	72
FEB 08...	1405	350	7.5	.0	2	13.0	2.7	72	79	86	8	93
MAR 29...	1515	186	7.3	7.5	3	12.2	1.7	210	<2	110	130	62
MAY 26...	1125	283	7.4	22.0	1	5.7	4.0	270	80	56	12	92
JUN 23...	1235	287	7.4	22.0	10	6.2	4.6	1200	790	1500	540	81
JUL 27...	1435	308	8.8	24.0	1	12.2	6.2	--	350	--	350	87
AUG 15...	1230	290	7.5	23.0	5	6.7	3.9	--	920	--	130	87

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 11...	24	20	5.3	16	1.3	59	0	48	15	--	25	23
FEB 08...	36	25	7.4	29	1.9	70	0	57	3.5	--	27	45
MAR 29...	33	17	4.8	13	1.1	35	0	29	2.8	--	17	23
MAY 26...	36	25	7.2	18	1.6	68	0	56	4.3	.0	22	32
JUN 23...	25	22	6.4	19	1.7	68	0	56	4.3	--	22	32
JUL 27...	28	23	7.2	22	2.0	70	1	59	.2	--	23	35
AUG 15...	25	24	6.6	20	2.3	76	0	62	3.8	--	21	35

DATE	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 11...	--	124	1	--	--	--	--	1.4	--	.14	--	2.7
FEB 08...	--	183	6	--	--	--	--	2.8	--	.22	--	5.0
MAR 29...	--	106	8	--	--	--	--	1.4	--	.03	--	--
MAY 26...	5.9	166	8	--	--	--	--	1.1	--	.15	--	4.9
JUN 23...	--	174	14	--	--	.33	.57	.90	1.8	.17	--	6.1
JUL 27...	--	200	21	.90	.10	.05	1.3	1.3	2.3	.25	.11	6.1
AUG 15...	--	154	10	.85	.11	.20	.73	.93	1.9	.24	.14	6.5

01389000 POMPTON RIVER AT TWO BRIDGES, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY								
26...	1125	50	1	90	0	0	0	7

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY								
26...	90	8	180	.0	16	0	30	1

01389110 PASSAIC RIVER AT RT. 46 AT SINGAC, NJ

LOCATION.--Lat 40°53'32", long 74°15'58", Passaic County, Hydrologic Unit 02030103, at bridge U.S. Route 46 at Singac, and 0.6 mi (1.0 km) downstream of the confluence of the Passaic and Pompton Rivers.

DRAINAGE AREA.--745 mi² (1,930 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1974 to current year.

REMARKS.--Operated as part of the USGS-EPA paired station network. Instantaneous water discharge estimated on the basis of water discharge for 01389500 Passaic River at Little Falls, drainage area relationships, and known diversions.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)
MAR										
10...	1240	E2000	254	7.5	7.0	4	7.7	18	46	72
29...	1145	E4400	177	7.2	6.5	7	9.9	14	220	62
APR										
07...	1605	E4600	165	7.2	7.0	5	10.2	13	58	40
21...	1415	E670	300	7.7	15.5	10	9.2	17	75	828
MAY										
03...	1345	E790	266	7.6	16.0	8	7.2	25	84	84
17...	1220	E570	298	7.6	17.5	7	7.6	20	83800	40
31...	1255	E270	379	7.5	23.0	2	5.6	25	83	815
JUN										
14...	1135	E490	310	7.8	20.5	2	6.1	28	720	250
29...	1115	E290	341	7.8	24.0	1	4.9	23	1100	82
JUL										
13...	1220	E350	399	7.6	25.0	1	4.3	45	540	200
25...	1210	E160	433	7.8	25.0	2	6.5	45	750	270
AUG										
08...	1050	E230	470	7.5	26.0	1	5.1	30	820	580
24...	1220	E260	302	7.6	21.0	2	6.2	25	290	120
SEP										
07...	1230	E180	565	7.6	24.0	15	5.4	30	720	160
21...	1215	E380	435	7.3	19.5	15	3.8	30	920	240

DATE	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
MAR										
10...	16	5.1	17	--	--	--	--	25	32	142
29...	--	--	--	30	0	25	3.0	--	--	106
APR										
07...	--	--	--	32	0	26	3.2	--	--	95
21...	--	--	--	78	0	64	2.5	--	--	192
MAY										
03...	--	--	--	--	--	--	--	--	--	163
17...	--	--	--	--	--	--	--	--	--	170
31...	--	--	--	102	0	84	5.2	--	--	231
JUN										
14...	20	6.5	22	74	0	61	1.9	33	35	205
29...	--	--	--	--	--	--	--	--	--	217
JUL										
13...	--	--	--	104	0	85	4.2	--	--	260
25...	--	--	--	--	--	--	--	--	--	261
AUG										
08...	--	--	--	--	--	--	--	--	--	269
24...	--	--	--	82	0	67	3.3	--	--	183
SEP										
07...	30	9.1	43	124	0	102	5.0	45	65	286
21...	--	--	--	--	--	--	--	--	--	246

01389110 PASSAIC RIVER AT RT. 46 AT SINGAC, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	OIL AND GREASE (MG/L)	CHLORO-PHYLL A (UG/L)
MAR										
10...	21	.76	.68	.42	1.1	1.9	.22	6.1	1	--
29...	13	.57	.19	.44	.63	1.2	.09	--	0	1.27
APR										
07...	6	.46	.15	.55	.70	1.2	.09	5.2	1	5.74
21...	28	.76	1.4	1.0	2.4	3.2	.39	1.8	2	12.3
MAY										
03...	24	.98	1.1	.70	1.8	2.7	.36	4.8	--	9.05
17...	24	.76	1.3	1.0	2.3	3.1	.38	7.3	3	1.63
31...	18	.92	2.5	1.1	3.6	4.5	.58	3.2	--	14.1
JUN										
14...	25	.95	1.4	1.2	2.6	3.6	.49	5.4	0	6.10
29...	16	1.2	1.6	.20	1.8	3.0	.57	--	1	27.6
JUL										
13...	37	1.5	2.4	.40	2.8	4.3	.79	5.4	3	12.7
25...	26	.87	2.3	1.5	3.8	4.7	.81	7.8	1	3.32
AUG										
08...	14	1.4	1.9	1.3	3.2	4.6	.85	4.7	0	10.9
24...	37	1.3	1.5	1.2	2.7	4.0	.70	6.9	0	14.2
SEP										
07...	16	1.6	2.9	.90	3.8	5.4	1.0	8.2	0	--
21...	21	1.9	--	--	--	--	1.0	7.9	0	3.03

DATE	CHLORO-PHYLL B (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
MAR									
10...	--	1	0	20	5	770	.1	41	30
29...	.566	1	2	<10	10	560	.0	31	20
APR									
07...	1.15	1	0	30	9	550	.0	16	30
21...	2.11	2	0	<10	11	1600	.0	21	40
MAY									
03...	.997	1	0	10	10	1400	.0	18	70
17...	.000	0	0	20	8	1000	.0	13	140
31...	2.39	1	0	20	6	1400	.0	23	70
JUN									
14...	1.48	3	0	20	80	1800	.0	75	120
29...	5.32	5	0	10	9	1300	.0	17	50
JUL									
13...	2.45	2	0	<10	7	2000	.0	17	50
25...	.349	3	0	10	10	1000	.0	16	40
AUG									
08...	2.06	1	0	<10	9	800	.0	24	10
24...	.642	0	0	10	12	1200	.0	26	70
SEP									
07...	--	1	0	10	10	910	.0	8	30
21...	.000	1	2	10	10	1100	.0	25	70

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ

LOCATION.--Lat 40°53'05", long 74°13'35", Passaic County, Hydrologic Unit 02030103, on left bank 0.6 mi (1.0 km) downstream from Beattie's Dam in Little Falls, and 1.0 mi (1.6 km) upstream from Peckman River. Daily dissolved oxygen and temperature data collected 0.5 mi (0.8 km) upstream from gaging station.

DRAINAGE AREA.--762 mi^2 (1,974 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1897 to current year. Monthly discharge only for September 1897, published in WSP 1302. Published as "at Paterson" September 1897 to September 1955.
CHEMICAL ANALYSES: Water years 1963 to current year.
SEDIMENT ANALYSES: Water years 1963-65.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: September 1897 to current year. Published as "at Paterson" September 1897 to September 1955.
WATER TEMPERATURES: October 1962 to current year.
DISSOLVED OXYGEN: October 1970 to current year.
SUSPENDED-SEDIMENT DISCHARGE: August 1963 to July 1965.

GAGE.--Water-stage recorder. Datum of gage is 120.00 ft (36.576 m) NGVD (levels by Passaic Valley Water Commission). Prior to Jan. 8, 1933, nonrecording gage and Jan. 8, 1933, to Sept. 30, 1955, water-stage recorder, at site 3.7 mi (6.0 km) downstream, datum NGVD (levels from New Jersey Geological Survey bench mark).

REMARKS.--Discharge records excellent. Diurnal fluctuation at medium and low flow caused by hydroelectric plant at Beattie's Dam. Flow regulated by reservoirs in Rockaway, Pequannock, Wanaque, and Pompton River Basin (see Passaic River Basin, reservoirs in). Large diversions for municipal supply from Passaic River above Beattie's Dam, and from Rockaway, Pequannock, and Wanaque Rivers (see Passaic River Basin, diversions). In addition, the Commonwealth Water Co., diverts small amounts from Canoe Brook near Summit, average for 1977 was 3.1 ft^3/s (0.088 m^3/s) and from Passaic River, average for 1977 was 13.3 ft^3/s (0.38 m^3/s); that company and the city of East Orange also divert water for municipal supply by pumping wells.

COOPERATION.--Gage-height record collected in cooperation with and once daily dissolved-oxygen and water-temperature records provided by the Passaic Valley Water Commission.

AVERAGE DISCHARGE.--80 years, 1,160 ft^3/s (32.85 m^3/s), unajusted.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,400 ft^3/s (125 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 26	0100	4750	134	6.00	1.829
Mar. 25	1215	*8440	239	8.22	2.505
Apr. 7	0500	4760	135	6.01	1.832

Minimum discharge, 40 ft^3/s (1.13 m^3/s) Aug. 20.
WATER TEMPERATURES: Maximum daily, 28.5°C July 21, 22; minimum daily, 0.5°C several days during winter months.
DISSOLVED OXYGEN: Maximum daily, 11.5 mg/L Dec. 10, 14; minimum daily, 3.1 mg/L June 27, Aug. 4, 15.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER DISCHARGE: Maximum daily discharge, 28,000 ft^3/s (793 m^3/s) Oct. 10, 1903; no flow July 3-5, 1904, July 16, 23, 1905.
WATER TEMPERATURES: Maximum daily, 28.5°C July 21, 22, 1963 and July 19, 1968; minimum daily, 0.0°C on many days during winter months.
DISSOLVED OXYGEN: Maximum daily, 14.4 mg/L Jan. 7, 1973; minimum daily, 1.7 mg/L June 23, 1976.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	370	1180	319	244	203	2730	2600	888	325	223	80	104
2	424	1080	284	266	206	2460	2180	769	537	195	111	104
3	433	872	252	266	213	2200	2730	696	371	168	145	97
4	605	715	229	259	206	2380	2790	639	233	150	262	85
5	464	659	232	266	219	3400	3860	851	219	138	176	75
6	277	647	220	251	203	3410	4560	1260	198	145	153	76
7	253	658	711	277	192	3050	4730	1640	281	195	171	80
8	277	607	1560	240	213	2760	4510	1510	230	176	155	81
9	745	574	1400	244	213	2420	4010	1370	583	206	270	80
10	1310	530	1070	333	219	2070	3450	1410	1520	179	266	87
11	1110	492	900	479	251	1760	2960	1400	1460	145	233	89
12	759	457	780	428	342	1400	2530	1210	1080	248	189	87
13	414	426	691	371	527	1520	2100	1030	691	333	244	76
14	340	401	547	362	707	2920	1730	815	474	259	321	67
15	300	376	493	358	734	3210	1310	675	410	173	251	65
16	299	356	484	325	613	3010	1040	557	362	138	189	95
17	288	336	493	259	513	2810	925	517	337	130	289	419
18	246	345	484	259	423	2610	839	484	309	163	329	226
19	238	333	451	270	397	2510	780	474	281	155	171	159
20	416	316	419	274	375	2280	718	465	346	179	138	244
21	2100	297	474	281	358	2030	670	437	724	192	97	290
22	2020	281	465	266	313	3450	639	388	414	143	274	199
23	1570	276	419	237	342	6600	593	342	274	108	388	138
24	1130	269	379	248	691	7830	713	309	237	89	219	251
25	905	263	337	255	4260	8390	1240	301	248	83	259	1270
26	1150	243	337	277	4540	7640	1400	270	442	93	203	1580
27	1220	248	329	277	3660	6340	1430	237	423	104	140	2020
28	972	250	297	255	3060	5290	1400	223	346	89	130	1580
29	762	308	325	248	---	4530	1270	206	301	83	111	815
30	640	359	293	209	---	3830	1070	206	285	83	106	442
31	843	---	289	200	---	3170	---	223	---	81	104	---
TOTAL	22880	14154	15963	8784	24193	110010	60777	21802	13941	4846	6174	10981
MEAN	738	472	515	283	864	3549	2026	703	465	156	199	366
MAX	2100	1180	1560	479	4540	8390	4730	1640	1520	333	388	2020
MIN	238	243	220	200	192	1400	593	206	198	81	80	65

CAL YR 1976 TOTAL 339352 MEAN 927 MAX 6170 MIN 111
WTR YR 1977 TOTAL 314505 MEAN 862 MAX 8390 MIN 65

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.0	8.5	3.5	0.5	0.5	5.0	11.5	14.0	22.0	24.0	24.5	24.0
2	16.0	8.0	3.5	0.5	0.5	4.0	11.5	14.0	21.5	24.0	24.0	25.0
3	15.0	7.5	3.0	0.5	1.0	4.5	10.5	15.5	20.5	24.0	24.0	25.0
4	15.0	8.5	1.5	2.0	2.0	5.0	11.0	16.0	20.5	24.0	23.0	24.5
5	15.0	8.5	1.0	3.0	1.5	4.0	10.5	15.5	21.5	24.0	24.0	24.0
6	15.5	8.0	1.5	1.5	1.0	5.0	8.5	16.0	21.5	25.0	24.0	24.0
7	15.5	7.5	4.0	1.5	1.5	6.5	8.5	15.5	20.0	24.0	25.0	23.5
8	17.0	8.0	4.0	1.5	1.5	6.0	8.5	15.5	19.0	24.0	25.5	23.5
9	17.0	6.0	1.5	2.0	2.0	6.5	8.5	15.5	18.5	24.5	25.5	21.5
10	16.0	6.0	1.5	1.5	3.0	8.5	8.5	14.5	16.5	24.5	26.0	21.5
11	15.0	6.0	1.5	0.5	1.0	9.0	9.5	13.0	16.5	25.0	25.0	20.5
12	14.0	6.0	1.5	0.5	1.0	10.0	11.0	14.0	18.0	24.0	25.5	19.5
13	13.0	5.0	3.0	1.5	1.0	10.5	13.0	16.0	18.5	24.0	25.0	19.5
14	13.0	5.0	1.0	1.5	1.5	10.5	14.5	16.0	20.0	25.0	24.0	20.0
15	13.0	5.0	1.5	1.5	3.0	9.5	14.5	16.0	20.5	25.0	23.0	19.5
16	13.5	5.0	2.5	1.5	1.5	9.5	13.5	16.5	20.5	26.0	23.0	19.5
17	13.0	5.0	4.0	0.5	1.5	9.0	14.0	18.0	21.5	27.0	23.5	19.0
18	11.5	6.0	4.0	1.0	1.5	8.0	14.5	19.5	22.0	28.0	23.0	19.5
19	10.5	6.0	4.0	1.0	3.0	6.0	15.5	20.5	22.0	27.0	23.0	19.5
20	11.0	5.5	5.0	3.0	3.0	6.0	15.0	19.5	23.0	27.0	23.0	21.0
21	11.5	5.0	4.0	3.0	3.0	6.0	15.0	21.0	21.5	28.5	21.0	20.0
22	10.5	5.5	2.0	0.5	2.0	6.5	16.0	20.5	21.5	28.5	21.5	19.5
23	9.5	5.0	2.0	0.5	3.5	5.0	17.0	21.5	20.5	26.0	21.5	18.0
24	9.5	4.0	2.0	1.5	4.0	4.0	17.0	23.0	21.5	25.0	21.5	17.0
25	9.5	3.0	1.5	1.0	5.0	4.5	15.0	23.5	23.0	25.0	20.5	15.5
26	10.5	3.5	1.5	1.0	5.0	4.5	14.0	23.0	21.5	24.5	20.5	15.0
27	9.0	6.0	0.5	0.5	5.0	5.5	13.0	23.0	22.0	23.0	20.5	15.0
28	8.5	7.0	1.0	1.0	6.0	8.5	13.5	22.0	23.0	23.0	21.0	16.0
29	7.0	7.0	1.5	0.5	---	8.0	13.0	22.0	23.5	23.0	19.5	16.0
30	8.0	5.0	1.0	0.5	---	11.0	13.0	22.0	23.5	23.0	23.5	16.5
31	9.5	---	1.5	0.5	---	13.0	---	21.5	---	23.5	24.5	---
MONTH	12.5	6.0	2.5	1.0	2.5	7.0	12.5	18.0	21.0	25.0	23.0	20.0
YEAR	MAX	28.5	MIN	0.5	MEAN	12.5						

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	8.8	8.7	10.8	9.2	9.8	8.5	8.1	4.3	3.8	6.5	3.6
2	6.3	8.7	10.0	10.8	10.0	10.1	8.7	7.9	3.4	3.6	4.1	3.8
3	5.5	8.8	10.3	11.0	9.5	10.1	9.1	7.3	3.5	3.8	4.2	3.7
4	6.0	8.6	10.5	10.7	8.7	9.6	9.8	7.0	3.9	4.1	3.1	3.7
5	6.1	8.3	10.7	10.5	9.0	11.0	10.3	7.2	4.2	5.0	3.3	3.8
6	5.6	8.8	10.6	10.7	9.2	11.0	10.2	6.7	4.4	5.5	3.7	4.8
7	4.8	8.9	10.3	10.3	8.9	10.4	10.5	7.1	3.9	4.8	3.6	4.1
8	4.7	9.2	10.8	10.2	8.8	10.0	10.4	6.8	4.5	4.0	4.5	3.3
9	5.0	9.5	11.4	10.1	8.9	9.7	10.4	7.2	4.3	4.0	4.8	4.4
10	6.0	9.8	11.5	10.2	8.8	9.0	10.1	7.7	6.7	4.5	3.7	4.5
11	6.8	9.6	11.3	10.8	8.9	8.8	9.8	8.4	6.6	5.2	3.7	4.2
12	6.7	9.6	11.3	10.5	8.3	8.3	9.2	8.2	6.5	4.9	4.0	5.1
13	6.4	9.4	10.8	11.0	8.9	8.2	8.7	7.5	5.3	3.6	3.8	5.2
14	6.0	9.7	11.5	10.5	9.0	9.0	8.3	7.3	5.0	3.5	4.0	4.3
15	6.0	9.6	11.3	10.1	9.5	9.7	7.4	6.7	4.0	5.0	3.1	4.4
16	5.8	9.3	11.1	10.4	9.6	9.0	7.5	6.6	3.8	5.2	4.2	4.7
17	6.0	9.5	10.6	10.0	10.0	9.0	8.1	6.0	3.8	4.4	4.0	4.5
18	6.1	9.6	10.5	9.8	10.3	9.0	8.0	5.4	3.6	5.8	4.5	4.7
19	6.6	9.4	10.4	9.5	10.1	9.2	7.8	4.8	3.6	5.7	4.9	4.3
20	6.8	9.0	10.5	9.4	9.8	9.4	7.7	4.2	4.0	5.5	4.7	4.2
21	7.6	8.9	9.7	9.4	9.7	10.8	7.6	4.2	4.6	4.7	6.3	4.1
22	8.2	8.6	10.6	9.4	9.7	10.5	7.3	4.4	3.3	4.5	5.7	3.2
23	7.7	9.3	10.7	9.0	10.3	10.9	7.3	4.6	3.6	4.6	4.2	3.2
24	7.9	9.5	10.9	7.6	10.0	11.0	7.0	4.2	4.1	4.5	4.3	3.4
25	8.2	9.9	11.0	9.0	11.4	10.7	6.9	4.2	4.3	6.0	4.3	3.6
26	8.1	10.0	11.2	9.3	11.2	11.0	8.1	4.0	3.6	4.1	4.4	8.0
27	8.4	9.3	10.8	9.5	11.4	11.0	8.0	4.4	3.1	5.1	4.5	7.7
28	9.0	8.8	10.8	9.2	10.5	10.3	8.2	4.7	3.7	6.0	4.7	7.2
29	9.0	8.5	10.6	9.1	---	9.5	8.0	5.0	3.3	5.9	4.8	6.0
30	9.1	8.5	10.6	9.4	---	9.0	7.9	5.3	3.5	6.0	5.0	5.5
31	8.8	---	10.7	9.5	---	8.2	---	4.7	---	5.4	4.8	---
MONTH	6.8	9.2	10.7	9.9	9.6	9.8	8.6	6.1	4.2	4.8	4.4	4.6
YEAR	MAX	11.5	MIN	3.1	MEAN	7.4						

01389880 PASSAIC RIVER AT RT. 46 AT ELMWOOD PARK, NJ

LOCATION.--Lat 40°53'37", long 74°07'46", Passaic County, Hydrologic Unit 02030103, at bridge on U.S. Route 46, at Elmwood Park, and 0.8 mi (1.3 km) upstream of Dundee Dam.

DRAINAGE AREA.--803 mi² (2,080 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1974 to current year.

REMARKS.--Operated as part of the USGS-EPA paired station network. Instantaneous water discharge estimated on the basis of water discharge for 01389500 Passaic River at Little Falls, drainage area relationships, and known diversions.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)
MAR												
10...	1045	E2100	263	7.8	7.5	8	12.0	16	330	240	66	--
28...	1330	E5300	182	7.0	5.5	10	13.2	16	1600	650	--	--
APR												
07...	1230	E4800	178	7.3	6.5	7	13.6	13	1200	330	50	20
21...	1105	E700	352	7.9	15.0	7	8.0	16	300	190	--	--
MAY												
03...	1025	E780	325	7.6	15.0	7	8.0	19	520	860	89	--
17...	0940	E530	334	7.5	17.5	7	7.0	20	440	240	--	--
31...	1000	E230	420	7.8	22.0	9	10.7	30	2400	44	--	--
JUN												
14...	0825	E390	288	7.7	20.0	2	6.2	26	1900	810	84	31
29...	0905	E410	447	7.8	25.0	1	5.3	30	7700	1000	--	--
JUL												
13...	0925	E380	371	7.3	25.0	1	4.8	35	B21000	3900	--	--
25...	0950	E95	451	8.3	25.5	2	8.4	45	770	200	--	--
AUG												
08...	0900	E150	436	7.6	26.5	1	4.0	30	15000	1000	--	--
24...	1040	E190	397	7.7	22.0	2	7.5	35	1300	340	--	--
SEP												
07...	1030	E90	461	8.0	24.0	6	9.4	30	1200	33	120	32
21...	1030	E350	362	7.3	19.0	8	3.0	35	B160000	B15000	--	--

DATE	TOTAL CALCIUM (CA) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
MAR												
10...	17	17	--	5.6	--	19	1.0	2.0	--	--	--	--
28...	--	--	--	--	--	--	--	--	27	0	22	4.3
APR												
07...	--	13	--	4.3	--	13	.8	1.4	37	0	30	3.0
21...	--	--	--	--	--	--	--	--	74	0	61	1.5
MAY												
03...	--	24	--	7.1	--	24	1.1	2.1	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	100	0	82	2.5
JUN												
14...	--	23	7.6	6.5	32	22	1.0	2.2	65	0	53	2.1
29...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
13...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
08...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	93	0	76	3.0
SEP												
07...	--	33	--	9.6	--	40	1.6	4.2	107	0	88	1.7
21...	--	--	--	--	--	--	--	--	--	--	--	--

01389880 PASSAIC RIVER AT RT. 46 AT ELMWOOD PARK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
MAR											
10...	25	32	167	22	.88	.55	.45	1.0	1.9	.20	6.3
28...	--	--	102	25	.51	.13	.09	.22	.73	.04	--
APR											
07...	17	21	95	17	.46	.16	.53	.69	1.2	.13	7.0
21...	--	--	193	14	1.2	1.1	.80	1.9	3.1	.33	3.0
MAY											
03...	27	37	177	24	1.2	.90	.60	1.5	2.7	.35	5.1
17...	--	--	180	15	1.4	.78	1.0	1.8	3.2	.38	6.2
31...	--	--	248	22	2.1	.52	1.4	1.9	4.0	.53	4.5
JUN											
14...	29	33	187	5	1.5	.57	1.1	1.7	3.2	.41	5.1
29...	--	--	279	7	2.3	1.1	1.2	2.3	4.6	.69	7.1
JUL											
13...	--	--	216	3	2.1	.48	.82	1.3	3.4	.60	6.3
25...	--	--	287	22	1.4	.40	1.7	2.1	3.5	.77	8.2
AUG											
08...	--	--	243	16	1.7	.45	1.7	2.1	3.8	.63	5.1
24...	--	--	238	30	2.3	.40	1.6	2.0	4.3	.58	7.6
SEP											
07...	42	55	247	21	2.7	.32	1.4	1.7	4.4	.71	9.0
21...	--	--	206	0	2.1	.60	1.3	1.9	4.0	.93	7.8

DATE	OIL AND GREASE (MG/L)	CHLORO-PHYLL A (UG/L)	CHLORO-PHYLL B (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
MAR											
10...	1	--	--	1	2	10	7	780	.2	59	30
28...	0	1.01	1.00	1	2	10	15	2000	.0	64	50
APR											
07...	0	6.71	3.56	1	0	30	11	790	.0	18	40
21...	1	13.1	2.56	2	0	<10	10	940	.0	34	100
MAY											
03...	--	9.24	1.34	1	0	<10	13	1200	.0	22	60
17...	3	.000	.000	1	0	20	7	1000	.0	19	50
31...	0	38.0	6.11	2	0	10	7	1000	.0	50	80
JUN											
14...	0	--	--	2	0	20	9	1100	.0	18	70
29...	0	12.2	1.54	7	2	10	9	1000	.0	53	50
JUL											
13...	3	8.85	.876	3	0	<10	7	1000	.1	30	50
25...	0	9.29	.000	2	0	10	11	730	.0	13	50
AUG											
08...	0	11.9	1.43	2	0	<10	10	800	.0	24	20
24...	0	32.8	.626	1	0	20	14	800	.0	30	60
SEP											
07...	0	29.7	2.90	1	0	<10	10	780	.0	9	30
21...	0	12.4	2.24	1	0	<10	13	610	.0	30	70

01391500 SADDLE RIVER AT LODI, NJ

LOCATION.--Lat 40°53'25", long 74°04'51", Bergen County, Hydrologic Unit 02030103, on left bank 560 ft (171 m) upstream from Outwater Lane Bridge in Lodi and 3.2 mi (5.1 km) upstream from mouth.

DRAINAGE AREA.--54.6 mi² (141.4 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: September 1923 to current year.
CHEMICAL ANALYSES: Water years 1962 to current year.

REVISED DISCHARGE RECORDS.--WSP 781: Drainage area. WSP 1031: 1940(M). WSP 1552: 1929(M), 1936(M), 1938. WRD-NJ 1969: 1967. WRD-NJ 1970: 1968, 1969.

GAGE.--Water-stage recorder. Concrete control since Nov. 2, 1938. Datum of gage is 25.00 ft (7.620 m) NGVD. Prior to Nov. 2, 1938, at site 560 ft (171 m) downstream at datum 2.54 ft (0.774 m) lower.

REMARKS.--Discharge records fair. Occasional regulation at low flow by mills above station. Diversion above station by Hackensack Water Co., for municipal supply (records given herein).

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--54 years, 98.9 ft³/s (2.801 m³/s), 24.60 in/yr (625 mm/yr), adjusted for diversion since 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (34.0 m³/s), and maximum (*):

Date	Time	Discharge (ft³/s)	(m³/s)	Gage height (ft)	(m)
Feb. 25	1100	*3130	88.6	8.96	2.731
Mar. 23	0645	2380	67.4	7.08	2.158

Minimum daily discharge, 20 ft³/s (0.56 m³/s) Sept. 8.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 3,770 ft³/s (107 m³/s) Sept. 12, 1971, gage height, 10.98 ft (3.347 m), from high-water mark in gage house; minimum, 1.0 ft³/s (0.028 m³/s) May 25, 1938, gage height, 1.03 ft (0.314 m), site and datum then in use; minimum daily, 6.0 ft³/s (0.17 m³/s) Aug. 4, 1930, Aug. 23, 1934.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	147	44	43	25	119	137	76	172	50	39	29
2	54	88	43	37	27	91	230	76	140	40	32	27
3	179	78	42	43	25	76	430	78	62	35	36	26
4	93	73	43	42	27	233	204	73	50	32	35	24
5	59	69	43	40	25	595	716	153	44	30	26	23
6	52	59	43	38	22	204	338	192	45	35	44	22
7	47	54	41	36	25	145	224	224	56	45	27	21
8	46	52	259	35	26	124	195	99	49	64	28	20
9	466	49	290	40	27	109	169	127	307	37	55	25
10	243	52	99	84	29	91	160	111	434	30	50	58
11	99	50	76	90	46	84	153	93	127	33	54	28
12	71	46	65	70	67	80	147	80	78	60	50	21
13	64	47	62	58	88	262	140	82	67	52	90	22
14	57	46	59	48	99	531	134	73	59	44	70	23
15	53	45	62	42	74	211	121	65	57	41	58	30
16	52	44	46	50	59	145	101	59	54	56	45	45
17	47	42	55	60	46	127	111	54	50	101	156	40
18	46	42	50	64	41	134	109	54	49	47	64	35
19	45	41	49	60	42	185	106	54	54	35	45	65
20	142	42	52	54	41	179	119	52	134	38	36	55
21	569	41	59	50	44	150	99	49	220	33	60	45
22	140	41	55	46	36	407	91	46	46	31	78	40
23	91	39	47	44	46	1560	88	46	40	31	52	70
24	80	39	46	42	74	319	147	41	50	25	61	180
25	106	40	42	38	2050	230	256	41	140	31	65	280
26	214	39	46	36	278	201	132	41	180	38	47	180
27	109	46	47	35	172	176	124	39	140	41	37	110
28	82	50	42	30	147	172	109	38	80	40	32	61
29	74	55	45	27	---	211	95	34	70	35	30	37
30	71	46	43	29	---	172	80	38	60	33	28	30
31	220	---	40	27	---	153	---	40	---	30	25	---
TOTAL	3725	1602	2035	1438	3708	7476	5265	2328	3114	1273	1555	1672
MEAN	120	53.4	65.6	46.4	132	241	176	75.1	104	41.1	50.2	55.7
MAX	569	147	290	90	2050	1560	716	224	434	101	156	280
MIN	45	39	40	27	22	76	80	34	40	25	25	20
(†)	0	0	0	0	0	2.9	2.2	4.6	4.8	7.0	13.1	13.9
MEAN‡	120	53.4	65.6	46.4	132	244	178	79.7	109	48.1	63.3	69.6
CFSM‡	2.20	0.98	1.20	0.85	2.42	4.47	3.26	1.46	2.00	0.88	1.16	1.27
IN‡	2.53	1.09	1.38	0.98	2.52	5.15	3.64	1.68	2.23	1.02	1.34	1.42

CAL YR 1976 TOTAL 40531 MEAN 111 MAX 1230 MIN 35 MEAN‡ 112 CFSM‡ 2.05 IN‡ 27.74
WTR YR 1977 TOTAL 35191 MEAN 96.4 MAX 2050 MIN 20 MEAN‡ 100 CFSM‡ 1.83 IN‡ 24.98

† Diversion, equivalent in cubic feet per second, above station by Hackensack Water Co. Records of diversion furnished by Hackensack Water Co.
‡ Adjusted for diversion.

01391500 SADDLE RIVER AT LODI, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)
NOV										
11...	1140	46	512	7.8	5.5	3	9.5	--	450	790
FEB										
08...	1050	E26	720	7.8	.0	2	12.5	1.5	8610	2
APR										
13...	0830	136	452	7.5	13.0	4	8.4	5.2	8160	<2
MAY										
24...	0930	40	577	7.6	19.5	3	5.5	5.5	1000	790
JUN										
21...	1105	121	292	7.3	20.0	1	6.3	8.5	20000	28000
AUG										
01...	0855	27	636	7.6	20.0	3	3.0	8.6	--	700
15...	1105	23	508	7.4	22.0	4	4.4	6.7	--	1700

DATE	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA+MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
NOV									
11...	260	20	170	43	48	13	29	3.8	155
FEB									
08...	88	2	210	55	59	16	54	4.4	189
APR									
13...	190	79	150	48	44	10	27	2.7	124
MAY									
24...	320	17	190	58	51	15	42	4.5	161
JUN									
21...	>10000	>24000	88	25	25	6.1	18	2.9	77
AUG									
01...	--	920	200	59	52	16	48	5.2	172
15...	--	790	170	44	45	13	37	4.6	154

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV									
11...	0	127	3.9	--	41	45	--	267	11
FEB									
08...	0	155	4.8	--	50	87	--	387	13
APR									
13...	0	102	6.3	--	35	44	--	291	8
MAY									
24...	0	132	6.5	.0	44	61	12	357	4
JUN									
21...	0	63	6.2	--	24	28	--	171	18
AUG									
01...	0	141	6.9	--	49	75	--	384	19
15...	0	126	9.8	--	40	59	--	306	10

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV									
11...	--	--	--	--	2.2	--	.88	--	4.2
FEB									
08...	--	--	--	--	6.2	--	1.1	--	4.0
APR									
13...	--	--	--	--	1.3	--	.33	--	2.4
MAY									
24...	--	--	--	--	1.4	--	1.2	--	5.9
JUN									
21...	--	--	--	--	1.1	--	.42	--	7.1
AUG									
01...	4.4	.63	2.0	1.0	3.0	8.0	1.9	1.8	4.8
15...	3.1	.31	1.8	.90	2.7	6.1	1.1	.99	6.4

01391500 SADDLE RIVER AT LODI, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY								
24...	0930	0	2	200	0	0	0	7

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY								
24...	120	8	180	.0	5	0	30	0

01392210 THIRD RIVER AT PASSAIC, NJ

LOCATION.--Lat 40°49'47", long 74°09'46", Passaic County, Hydrologic Unit 02030103, on right bank 400 ft (122 m) upstream from bridge on State Highway 3, 0.8 mi (1.3 km) south of Passaic, 1.2 mi (1.9 km) upstream from Passaic River.

DRAINAGE AREA.--11.8 mi² (30.6 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: May to September 1977.

GAGE.--Water-stage recorder. Datum of gage is 22.15 ft (6.75 m) NGVD.

REMARKS.--Discharge records good except those above 300 ft³/s (8.50 m³/s), which are fair. Some regulation from ponds upstream.

EXTREMES FOR PERIOD MAY TO SEPTEMBER.--Maximum discharge, 542 ft³/s (15.3 m³/s) June 9, gage height, 4.74 ft (1.445 m); minimum, 3.4 ft³/s (0.10 m³/s) Sept. 23, gage height, 1.78 ft (0.543 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								---	43	18	5.3	7.2
2								---	21	13	6.6	6.3
3								---	12	9.6	29	5.7
4								---	8.1	21	17	5.1
5								---	14	15	35	6.0
6								---	16	13	13	6.6
7								---	15	19	27	5.3
8								---	13	17	15	5.1
9								---	98	10	30	4.9
10								---	76	11	8.7	40
11								---	24	15	8.1	6.0
12								---	21	15	6.3	5.3
13								---	14	12	47	5.1
14								---	14	6.9	20	5.1
15								---	13	8.7	13	5.3
16								---	12	6.6	13	22
17								---	13	5.7	12	50
18								16	9.6	4.9	12	11
19								13	8.1	4.3	9.1	16
20								12	15	6.6	6.9	39
21								13	23	5.1	91	7.8
22								11	13	4.5	88	4.1
23								7.1	8.4	4.7	13	4.3
24								7.4	6.0	4.5	16	47
25								7.7	30	4.9	17	115
26								6.0	26	6.6	10	65
27								5.3	23	6.9	8.7	30
28								4.5	21	6.0	10	9.6
29								6.0	17	4.9	7.8	14
30								16	16	10	6.6	16
31								11	---	6.6	7.2	---
TOTAL								---	643.2	297.0	609.3	569.8
MEAN								---	21.4	9.58	19.7	19.0
MAX								---	98	21	91	115
MIN								---	6.0	4.3	5.3	4.1

RESERVOIRS IN PASSAIC RIVER BASIN

01379990 SPILTROCK RESERVOIR.--Lat 40°57'40", long 74°27'45", Morris County, Hydrologic Unit 02030103, at dam on Beaver Brook, 2 mi (3 km) northeast of Hibernia, NJ. DRAINAGE AREA, 5.50 mi^2 (14.2 km^2). PERIOD OF RECORD, September 1925 to September 1931, December 1948 to September 1950, October 1953 to current year. Monthend contents only 1925-31, 1948-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environmental Protection. GAGE, water-stage recorder. Datum of gage is NGVD.

Reservoir is formed by a concrete gravity dam with earth embankment; present dam constructed 1946-48 and sluice gate first closed Dec. 22, 1948. Prior to 1946, reservoir was formed by earthfill dam with crest about 20 ft (6 m) lower. Capacity of spillway level, 3,310,000,000 gal (12.53 hm^3), elevation, 835 ft (254 m). Flow is regulated by two 30-inch (0.8 m) sluice gates. Flow is released for diversion for municipal supply of Jersey City. Records furnished by Jersey City, Bureau of Water.

01380900 BOONTON RESERVOIR.--Lat 40°53', long 74°24', Morris County, Hydrologic Unit 02030103, at dam on Rockaway River at Boonton, NJ. DRAINAGE AREA, 119 mi^2 (308 km^2). PERIOD OF RECORD, April 1904 to September 1950, October 1953 to current year. Monthend contents only 1904-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environmental Protection. GAGE, hook gage. Datum of gage is NGVD.

Reservoir is formed by a cyclopean masonry dam with earth wings; dam completed and storage began in 1904. Total capacity at spillway level, 7,620,000,000 gal (28.84 hm^3) elevation, 305.25 ft (93.04 m) of which 7,366,000,000 gal (27.88 hm^3) is usable contents above elevation 259.75 ft (79.17 m), sill of lowest outlet gate. Flow regulated by flashboards, 3 outlets in gatehouse at head of conduit and by two 48-inch (1.22 m) pipes bottom of sluice pipes at elevation 205 ft (62 m). Water is diverted from reservoir for municipal supply of Jersey City. Records furnished by Jersey City, Bureau of Water.

01382100 CANISTEAR RESERVOIR.--Lat 41°06'30", long 74°29'30", Sussex County, Hydrologic Unit 02030103, at dam on Pacock Brook, 1.8 mi (2.9 km) northeast of Stockholm, NJ. DRAINAGE AREA, 5.6 mi^2 (14.5 km^2). PERIOD OF RECORD, October 1923 to September 1950, October 1953 to current year. Monthend contents 1923-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environmental Protection. GAGE, stage gage. Datum of gage is NGVD.

Reservoir is formed by earth-embankment type dam, completed about 1896. Capacity at spillway level, 2,407,000,000 gal (9.110 hm^3), elevation, 1,086.0 ft (331 m). Reservoir used for storage and water released for diversion at Macopin intake dam on Pequannock River prior to May 21, 1961, and for diversion at Charlotteburg Reservoir on Pequannock River since May 21, 1961, for municipal supply for city of Newark. Outflow is controlled mostly by operation of gates in pipes through dam. Records furnished by city of Newark, Division of Water Supply.

01382200 OAK RIDGE RESERVOIR.--Lat 41°02'30", long 74°30'10", Passaic County, Hydrologic Unit 02030103, at dam on Pequannock River, 0.9 mi (1.4 km) southwest of Oak Ridge, NJ. DRAINAGE AREA, 27.3 mi^2 (70.7 km^2). PERIOD OF RECORD, October 1923 to September 1950, October 1953 to current year. Monthend contents only 1924-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environmental Protection. GAGE, staff gage. Datum of gage is NGVD.

Reservoir is formed by earthfill dam with concrete-core wall and ogee overflow section; dam constructed between 1880-92; dam raised 10 ft (3 m) during 1917-19. Capacity at spillway level, 3,895,000,000 gal (14.74 hm^3), elevation, 846.0 ft (257.86 m). Reservoir used for storage and water released for diversion at Macopin intake dam on Pequannock River prior to May 21, 1961, and for diversion at Charlotteburg Reservoir on Pequannock River since May 21, 1961, for municipal supply of city of Newark. Outflow is controlled mostly by operation of gates in pipes through dam. Records furnished by city of Newark, Division of Water Supply.

01382300 CLINTON RESERVOIR.--Lat 41°04'30", long 74°27'00", Passaic County, Hydrologic Unit 02030103, at dam on Clinton Brook, 2.0 mi (3 km) north of Newfoundland, NJ. DRAINAGE AREA, 10.5 mi^2 (27.2 km^2). PERIOD OF RECORD, October 1923 to September 1950, October 1953 to current year. Monthend contents only 1923-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Environmental Protection. GAGE, staff gage. Datum of gage is NGVD.

Reservoir is formed by earthfill dam constructed between 1889-92. Capacity at spillway level, 3,518,000,000 gal (13.32 hm^3), elevation, 992.0 ft (302.36 m). Reservoir used for storage and water released for diversion at Macopin intake dam on Pequannock River prior to May 21, 1961, and for diversion at Charlotteburg Reservoir since May 21, 1961, for municipal supply of city of Newark. Outflow is controlled mostly by operation of gates in pipes through dam. Records furnished by city of Newark, Division of Water Supply.

01382380 CHARLOTTEBURG RESERVOIR.--Lat 41°01'34", long 74°25'30", Passaic County, Hydrologic Unit 02030103, at dam on Pequannock River, 1.1 mi (1.8 km) upstream from Macopin River, and 1.5 mi (2.4 km) southeast of Newfoundland, NJ. DRAINAGE AREA, 56.2 mi^2 (145.6 km^2). PERIOD OF RECORD, May 1961 to current year. GAGE, water-stage recorder. Datum of gage is NGVD.

Reservoir is formed by concrete-masonry dam and earth embankment, with concrete spillway at elevation 738.00 ft (224.942 m); storage began May 19, 1961. Spillway equipped with Bascule gate 5 ft (1.5 m) high. Capacity, 2,964,000,000 gal (11.22 hm^3), elevation, 743.00 ft (226.46 m), top to Bascule gate. No dead storage. Outflow is controlled by sluice and automatic Bascule gates. Water diverted from reservoir since May 21, 1961, for municipal supply of city of Newark. Records furnished by city of Newark, Division of Water Supply.

REVISION.--WRD-NJ 1974: Station number.

01382400 ECHO LAKE.--Lat 41°03'00", long 74°24'30", Passaic County, Hydrologic Unit 02030103, at Echo Lake Dam on Macopin River, 1.6 mi (2.6 km) north of Charlotteburg, NJ, and 1.9 mi (3.1 km) upstream from mouth. DRAINAGE AREA, 4.35 mi^2 (11.27 km^2). PERIOD OF RECORD, October 1927 to September 1950, October 1953 to current year. Monthend contents only 1928-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environmental Protection. GAGE, staff gage. Datum of gage is NGVD.

Lake is formed by earth-embankment type dam completed about 1925. Capacity at spillway level, 1,583,000,000 gal (5.992 hm^3), elevation, 893.0 ft (272.19 m), with provision for additional storage of 180,000,000 gal (681,300 m^3) at elevation 894.9 ft (272.77 m) with flashboards. Usable contents, 1,045,000,000 gal (3.955 hm^3) above elevation 880.0 ft (268.22 m). Lake used for storage and water released for diversion at Macopin intake dam on Pequannock River prior to May 21, 1961, and water diverted to Charlotteburg Reservoir on Pequannock River since May 21, 1961, for municipal supply of city of Newark. Outflow to Macopin River controlled by operation of gates in gatehouse at dam and water released through pipe and canal to Charlotteburg Reservoir. Records furnished by city of Newark, Division of Water Supply.

RESERVOIRS IN PASSAIC RIVER BASIN--Continued

01383000 GREENWOOD LAKE.--Lat 41°09'36", long 74°20'03", Passaic County, Hydrologic Unit 02030103, in gatehouse near right end of Greenwood Lake Dam on Wanaque River at Awosting. DRAINAGE AREA, 27.1 mi² (7.02 km²). PERIOD OF RECORD, June 1898 to November 1903, June 1907 to current year (gage heights only prior to October 1953). GAGE, water-stage recorder. Datum of gage is 608.86 ft (185.58 m) NGVD (levels from New Jersey Geological Survey bench mark). Prior to Oct. 1, 1931, staff gage on former railroad bridge at site 100 ft (30 m) upstream at datum 89.75 ft (27.36 m) lower.

Reservoir is formed by earthfill dam with concrete spillway; dam completed about 1837 and reconstruction completed in 1928 with crest of spillway 0.25 ft (0.08 m) lower. Usable capacity, 6,860,000,000 gal (25.96 hm³) between gage heights -4.00 ft (-1.22 m), sill of gate, and 10.00 ft (3.0 m), crest of spillway. Dead storage, 7,140,000,000 gal (27.02 hm³). Outflow mostly regulated by two gates, 3.5 by 5.0 ft (1.1 m by 1.5 m). Records given herein represent usable capacity. Lake used for recreation.

EXTREMES FOR CURRENT YEAR: Maximum contents, 7,593,000,000 gal (28.740 hm³) Mar. 3, gage height, 11.18 ft (3.451 m); minimum, 6,256,000,000 gal (23.679 hm³) Aug. 30, gage height, 9.01 ft (2.781 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 9,528,000,000 gal (36.068 hm³) Oct. 9-14, 1903, gage height, 14.25 ft (4.343 m), present datum); minimum, 3,160,000,000 gal (11.96 hm³) several days in November 1900, gage height, 3.50 ft (1.067 m), present datum.

01386990 WANAQUE RESERVOIR.--Lat 41°02'33", long 74°17'36", Passaic County, Hydrologic Unit 02030103, at Raymond Dam on Wanaque River at Wanaque. DRAINAGE AREA, 90.4 mi² (234.1 km²). PERIOD OF RECORD, February 1928 to September 1950, October 1953 to current year. Monthend contents only 1928-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environmental Protection. GAGE, water-stage recorder. Datum of gage is NGVD (levels by North Jersey District Water Supply Commission).

Reservoir is formed by earthfill with concrete-core wall main dam and seven secondary dams; dams completed in 1927 and storage began in March 1928. Total capacity at spillway level, 28,010,000,000 gal (106.0 hm³) elevation, 300.3 ft (91.5 m). Capacity available by gravity at spillway level, 26,230,000,000 gal (99.28 hm³). Outflow mostly controlled by sluice gates in intake conduits in gage house. Water is diverted from reservoir for municipal supply. Division to reservoir from Post Brook and Ramapo River (see Passaic River Basin, diversions). Records furnished by North Jersey District Water Supply Commission.

MONTHEND ELEVATION OR GAGE HEIGHT AND CONTENTS, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)
	01379990	SPLITROCK	RESERVOIR *	01380900	BOONTON	RESERVOIR *	01382100	CANISTEAR	RESERVOIR †
Sept. 30	834.75	3,256	-	297.74	5,738	-	1,086.10	2,417	-
Oct. 31	835.15	3,336	+4.0	304.17	7,339	+79.9	1,083.80	2,182	-11.7
Nov. 30	835.05	3,316	-1.0	304.65	7,464	+6.4	1,078.20	1,644	-27.7
Dec. 31	835.10	3,374	-4.5	304.87	7,521	+2.8	1,072.80	1,171	-23.7
CAL YR 1976	-	-	0	-	-	-.9	-	-	-5.3
Jan. 31	835.05	3,316	-4.5	301.99	6,786	-36.7	1,065.80	630	-26.9
Feb. 28	835.35	3,374	-3.2	305.67	7,729	+52.1	1,062.40	414	-12.0
Mar. 31	835.25	3,355	-.9	305.92	7,794	+3.2	1,075.80	1,429	+50.6
Apr. 30	835.15	3,336	-1.0	305.51	7,688	-5.5	1,080.60	1,868	+22.7
May 31	834.95	3,294	-2.1	304.22	7,352	-16.8	1,083.10	2,110	+12.1
June 30	835.05	3,316	+1.1	304.79	7,500	+7.6	1,083.70	2,171	+3.2
July 31	834.60	3,226	-4.5	297.23	5,615	-94.1	1,083.30	2,131	-2.0
Aug. 31	832.90	2,892	-16.7	291.27	4,275	-66.9	1,076.60	1,499	-31.6
Sept. 30	830.10	2,401	-25.3	290.59	4,132	-7.4	1,071.10	1,028	-24.3
WTR YR 1977	-	-	-3.6	-	-	-6.8	-	-	-5.9

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)
	01382200	OAK RIDGE	RESERVOIR †	01382300	CLINTON	RESERVOIR †	01382380	CHARLOTTEBURG	RESERVOIR †
Sept. 30	824.80	1,328	-	982.90	2,365	-	731.65	1,807	-
Oct. 31	825.60	1,401	+3.6	982.00	2,270	-4.8	733.20	1,943	+6.8
Nov. 30	825.60	1,401	0	979.20	1,975	-15.2	732.60	1,889	-2.8
Dec. 31	824.60	1,310	-4.6	978.50	1,899	-3.8	733.25	1,948	+2.9
CAL YR 1976	-	-	-11.0	-	-	-7.0	-	-	-3.1
Jan. 31	819.80	913	-19.8	975.60	1,605	-14.7	732.80	1,907	-2.0
Feb. 28	825.40	1,383	+26.0	976.10	1,654	+2.7	736.60	2,264	+19.7
Mar. 31	846.00	3,895	+12.5	989.10	3,147	+74.6	740.20	2,643	+18.9
Apr. 30	846.20	3,924	+1.4	992.10	3,531	+19.8	740.60	2,687	+2.2
May 31	846.10	3,909	-.7	992.00	3,518	-.6	734.60	2,072	-30.6
June 30	837.70	2,772	-58.7	991.00	3,390	-6.6	733.25	1,948	-6.4
July 31	830.50	1,902	-43.4	982.80	2,355	-51.7	733.10	1,934	+6.8
Aug. 31	825.50	1,392	-25.4	980.00	2,058	-14.8	731.70	1,811	-6.2
Sept. 30	821.50	1,043	-18.0	978.40	1,888	-8.8	732.40	1,872	+3.2
WTR YR 1977	-	-	-1.2	-	-	-2.0	-	-	+.3

RESERVOIRS IN PASSAIC RIVER BASIN--Continued

MONTHEND ELEVATION OR GAGE HEIGHT AND CONTENTS, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)
	01382400 ECHO LAKE †			01383000 GREENWOOD LAKE **			01386990 WANAQUE RESERVOIR †		
Sept. 30	893.00	1,583	-	10.11	6,928	-	293.46	23,112	-
Oct. 31	893.10	1,592	-.4	10.44	7,133	+10.2	297.19	25,713	+13.0
Nov. 30	892.90	1,574	-1.0	10.12	6,934	-10.3	296.26	25,052	-34.1
Dec. 31	893.00	1,583	-.5	a10.10	6,922	-.6	295.69	24,653	-19.9
CAL YR 1976	-	-	-.03	-	-	-.7	-	-	-21.6
Jan. 31	891.70	1,467	-5.8	a10.03	6,879	-2.1	291.97	22,109	-127
Feb. 28	889.70	1,293	-9.6	10.70	7,294	+22.9	293.03	22,821	+39.3
Mar. 31	893.10	1,592	+14.9	10.40	7,108	-9.3	302.38	29,614	+33.9
Apr. 30	893.10	1,592	0	10.24	7,009	-5.1	302.16	29,442	-8.9
May 31	893.00	1,583	-.4	9.97	6,842	-8.3	300.41	28,097	-67.1
June 30	890.80	1,388	-10.1	9.94	6,823	-1.0	297.12	25,664	-126
July 31	889.40	1,268	-6.0	9.53	6,573	-12.5	291.68	21,918	-187
Aug. 31	887.10	1,080	-9.4	9.38	6,482	-4.6	286.16	18,436	-174
Sept. 30	886.30	1,014	-3.4	10.11	6,928	+23.1	282.61	16,395	-105
WTR YR 1977	-	-	-2.4	-	-	0	-	-	-28.5

* Elevation at 0900.
** Gage height at 2400.
† Elevation at 0800 on first day of following month.
a Gage height estimated.

DIVERSIONS IN PASSAIC RIVER BASIN

01380800 Jersey City diverts water from Boonton Reservoir on Rockaway River at Boonton for municipal supply. Records furnished by Jersey City, Bureau of Water.

01382490 City of Newark diverts water from reservoir formed by Macopin intake dam on Pequannock River and since May 21, 1961, also from Charlotteburg Reservoir on Pequannock River (diversion No. 01382370) for municipal supply. Records furnished by city of Newark, Division of Water Supply.

North Jersey District Water Supply Commission diverts water for municipal supply from Wanaque Reservoir on Wanaque River (01386980). In addition to water from Wanaque Reservoir, the Commission stores water diverted into Wanaque Reservoir from Post Brook near Wanaque (01387020) and Ramapo River by pumping from Pompton Lakes (01387990). Figures of diversion from Wanaque Reservoir given herein show total diversion from Passaic River basin by North Jersey District Water Supply Commission. Records furnished by North Jersey District Water Supply Commission.

01388500 Passaic Valley Water Commission supplements the dependable yield of its supply at Little Falls by diverting water at high flows at the Jackson Avenue Pumping Station into Point View Reservoir on Haycock Brook for release as required to sustain minimum flow requirements. Also water may be released into Haycock Brook for maintenance of flow in that stream. These diversions and releases occur upstream of Pompton Plains gaging station. Records furnished by Passaic Valley Water Commission.

01389490 The Passaic Valley Water Commission diverts water from Passaic River above Beattie's Dam at Little Falls for municipal supply. Records furnished by Passaic Valley Water Commission.

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Month	JERSEY CITY	NEWARK	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION		PASSAIC VALLEY WATER COMMISSION
			FROM WANAQUE RESERVOIR	FROM RAMAPO RIVER TO WANAQUE RESERVOIR	
October	110	118	143	73.6	78.0
November	108	115	142	21.5	79.3
December	110	114	138	0	79.2
CAL YR 1976	107	118	142	8.0	83.3
January	110	105	165	0	69.6
February	112	81.4	195	31.1	71.8
March	113	94.2	159	11.1	78.0
April	112	125	142	0	76.8
May	109	122	158	0	93.0
June	107	124	162	0	97.6
July	110	108	181	0	99.4
August	113	102	175	0	101
September	117	102	178	10.7	96.9
WTR YR 1977	111	109	161	20.7	85.2

NOTE.--Records for diversion from Post brook to Wanaque Reservoir not available for this water year. Estimated diversion of 3.1 ft³/s (0.088 m³/s) for year made on the basis of records for West Brook near Wanaque.

DIVERSIONS FROM AND RELEASES TO POMPTON RIVER BY POINT VIEW RESERVOIR

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	STORED	*RELEASED
October	0	0
November	0	0
December	0	0
CAL YR 1976	0	0
January	0	0
February	0	0
March	0	0
April	0	0
May	0	0
June	0	0
July	0	0
August	0	0
September	0	0
WTR YR 1977	0	0

* Water released into Haycock Brook to maintain minimum flow conditions not included in these figures.

01393450 ELIZABETH RIVER AT URSINO LAKE, ELIZABETH, NJ

LOCATION.--Lat 40°40'30", long 74°13'20", Union County, Hydrologic Unit 02030104, on left bank at Ursino Lake Dam 75 ft (23 m) upstream of bridge on Trotters Lane and 3.8 mi (6.1 km) upstream from mouth.

DRAINAGE AREA.--16.9 mi² (43.8 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1921 to current year.

REVISED DISCHARGE RECORDS.--WSP 1552: Drainage area, 1922-23, 1927-29(M), 1932, 1933-34(M), 1938(P), 1942(M), 1944(P), 1945(M), 1948(P), 1952-53(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is NGVD (levels by Corps of Engineers). Prior to Oct. 1, 1922, nonrecording gage at site 2,800 ft (850 m) downstream at datum 4.14 ft (1.262 m) higher and Oct. 1, 1922, to May 18, 1923, at same site at datum 5.23 ft (1.594 m) higher. May 19, 1923 to Dec. 27, 1972, at site 2,800 ft (850 m) downstream at datum 5.23 ft (1.594 m) higher and published as "Elizabeth River at Elizabeth" (station 01393500).

REMARKS.--Discharge records good except those for period of no gage-height record and those below 10 ft³/s (0.28 m³/s), which are fair. Diversion by pumpage from Hammock Well Field, in Union, for municipal supply by Elizabethtown Water Co., probably reduces the flow past the station.

AVERAGE DISCHARGE.--56 years, 25.4 ft³/s (0.719 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,680 ft³/s (47.6 m³/s) June 9, elevation, 21.57 ft (6.575 m), no other peak above base of 1,500 ft³/s (42.5 m³/s); minimum discharge, 2.6 ft³/s (0.07 m³/s) Sept. 12, elevation, 13.08 ft (3.987 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,110 ft³/s (116 m³/s) Aug. 28, 1971, (gage height, 18.7 ft or 5.70 m, from floodmark, site and datum then in use) from rating curve extended above 1,100 ft³/s (31.2 m³/s) on basis of contracted-opening measurement of peak flow; no flow many times.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	120	6.0	4.8	6.8	11	10	6.5	66	8.0	11	6.3
2	13	20	7.4	5.3	6.8	10	13	8.0	10	6.3	7.5	6.0
3	155	10	6.0	5.8	7.3	9.5	23	8.0	7.8	5.0	48	4.3
4	45	8.0	5.6	6.3	7.8	276	23	12	6.0	4.8	9.8	5.2
5	22	8.0	5.4	6.5	10	68	264	91	5.0	6.8	17	3.0
6	13	7.8	5.2	6.5	6.0	14	34	24	22	8.3	14	5.8
7	11	7.0	11	9.2	6.3	11	14	11	12	8.6	41	5.8
8	24	6.5	22	6.3	7.3	11	11	7.3	8.3	9.2	14	5.8
9	180	7.5	9.8	5.3	7.0	9.8	9.8	27	379	6.8	24	5.3
10	130	11	8.0	112	13	9.5	9.8	9.8	142	4.5	11	21
11	62	9.4	7.3	14	20	9.2	10	8.9	15	6.0	8.9	3.5
12	35	8.0	12	9.5	35	8.9	10	8.9	8.3	58	7.0	4.3
13	20	7.2	6.8	7.3	20	127	10	8.3	8.9	11	84	5.0
14	14	6.0	6.8	7.3	13	94	10	6.8	13	7.5	18	7.3
15	17	5.8	7.8	8.3	10	17	9.8	6.0	9.5	6.5	8.6	4.8
16	15	6.3	6.8	6.8	8.0	12	9.5	7.5	8.9	5.8	7.8	46
17	13	9.0	8.6	7.8	7.8	11	8.3	8.0	6.9	5.3	9.8	58
18	12	8.0	5.8	7.8	7.5	15	8.3	21	7.8	7.0	6.8	5.8
19	11	7.0	5.0	7.8	6.5	23	9.5	14	6.5	7.5	6.3	13
20	150	6.2	16	8.6	7.8	16	9.5	8.3	26	16	5.3	66
21	160	6.0	23	7.5	8.0	15	9.5	7.0	14	8.0	3.8	8.6
22	20	5.6	6.3	6.3	7.5	251	9.8	5.8	8.3	6.5	126	6.5
23	12	7.2	5.5	5.8	9.2	226	9.5	8.0	8.3	5.0	13	34
24	18	6.6	4.5	6.8	70	34	11	8.6	7.5	4.0	24	119
25	35	5.9	4.5	9.2	207	17	19	8.6	93	24	14	226
26	100	5.0	9.8	7.5	26	13	15	8.0	27	9.2	7.8	70
27	70	4.8	6.3	7.0	12	11	14	7.5	10	5.8	6.0	22
28	35	10	6.0	7.3	18	11	17	6.0	22	5.0	4.8	11
29	16	24	6.8	6.8	---	11	13	5.0	18	5.3	6.0	7.8
30	10	12	5.8	4.5	---	11	7.8	8.9	6.9	5.8	6.3	7.2
31	120	---	5.2	8.3	---	11	---	6.8	---	3.8	6.5	---
TOTAL	1558	365.8	252.2	328.2	571.6	1373.9	632.1	382.5	987.9	281.3	578.0	794.3
MEAN	50.3	12.2	8.14	10.6	20.4	44.3	21.1	12.3	32.9	9.07	18.6	26.5
MAX	180	120	23	112	207	276	264	91	379	58	126	226
MIN	10	4.8	4.5	4.5	6.0	8.9	7.8	5.0	5.0	3.8	3.8	3.0

CAL YR 1976 TOTAL 8572.2 MEAN 23.4 MAX 308 MIN 4.0
WTR YR 1977 TOTAL 8105.8 MEAN 22.2 MAX 379 MIN 3.0

01394500 RAHWAY RIVER NEAR SPRINGFIELD, NJ

LOCATION.--Lat 40°41'11", long 74°18'44", Union County, Hydrologic Unit 02030104, on left bank 50 ft (15 m) downstream from bridge on U.S. Highway 22, 100 ft (30 m) downstream from Pope Brook, and 1.5 mi (2.4 m) south of Springfield.

DRAINAGE AREA.--25.5 mi^2 (66.0 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: July 1938 to current year.

REVISED DISCHARGE RECORDS.--WSP 1622: 1945. WRD-NJ 1973: 1938(M), 1968(M), 1971(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 66.17 ft (20.169 m) NGVD.

REMARKS.--Discharge records good. Water for municipal supply diverted from river by city of Orange. The flow past this station is affected by diversions by pumpage from wells by Orange, South Orange, Short Hills Water Co., and Springfield station of Elizabethtown Water Co.

AVERAGE DISCHARGE.--39 years, 27.5 ft^3/s (0.779 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft^3/s (28.3 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 25	0100	1260	35.7	5.95	1.813
Mar. 22	1900	*1950	55.2	7.26	2.213
Apr. 5	0430	1140	32.3	5.64	1.719

Minimum discharge, 1.5 ft^3/s (0.042 m^3/s) Sept. 11, 12, gage height, 1.22 ft^3/s (0.372 m^3/s).

EXTREMES FOR PERIOD FOR RECORD.--Maximum discharge, 5,430 ft^3/s (154 m^3/s) Aug. 2, 1973 (gage height, 9.76 ft or 2.975 m, from floodmark) from rating curve extended above 1,600 ft^3/s (35.2 m^3/s) on basis of slope-area measurement of peak flow; minimum, 0.1 ft^3/s (0.003 m^3/s) Sept. 11, 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	19	3.8	2.6	2.4	11	13	6.2	57	3.4	3.4	2.6
2	6.4	8.4	4.2	3.0	3.1	7.8	101	6.2	6.2	3.0	5.8	2.6
3	137	8.4	2.8	3.4	3.1	6.6	94	6.2	3.8	3.0	34	2.4
4	6.6	7.0	3.4	3.0	3.4	231	44	9.1	3.4	3.4	7.0	1.9
5	3.0	6.2	3.4	3.8	3.4	138	578	71	3.4	3.4	5.4	2.2
6	3.8	5.4	3.4	3.0	3.1	35	84	20	4.6	3.8	6.2	2.6
7	3.0	6.6	46	3.4	3.1	18	49	9.8	11	5.0	63	2.6
8	2.8	6.2	10	3.0	3.1	12	38	6.6	3.8	5.8	6.6	2.6
9	286	6.6	6.2	2.6	3.1	10	28	22	225	3.0	11	2.4
10	14	9.8	5.4	62	3.1	9.1	24	8.4	131	2.4	3.8	28
11	5.8	8.4	4.6	14	6.2	8.4	23	6.6	13	2.4	5.4	2.1
12	4.6	7.7	8.4	6.2	24	9.1	20	5.8	6.2	33	2.8	1.9
13	4.2	7.0	3.8	3.8	33	188	19	5.8	5.8	5.8	53	2.1
14	4.6	6.6	3.8	3.8	15	97	18	5.8	5.4	3.0	7.7	2.2
15	5.4	6.6	4.2	4.6	9.1	29	19	5.0	4.6	2.6	4.6	2.2
16	5.4	6.6	4.2	4.2	5.8	20	16	5.0	4.6	2.4	2.6	18
17	5.0	7.0	5.0	4.6	4.6	15	15	6.2	4.2	2.4	3.0	41
18	4.6	7.0	3.4	4.2	3.8	51	15	13	3.8	2.6	2.8	2.8
19	6.2	6.6	3.4	3.8	4.2	35	15	10	3.4	3.0	2.4	9.8
20	237	5.8	14	4.2	4.2	24	15	5.0	29	10	2.2	115
21	242	5.4	13	3.8	4.2	17	17	5.0	20	2.8	2.1	6.6
22	14	6.2	3.4	3.1	3.8	776	15	4.6	3.8	2.4	110	3.4
23	5.8	7.0	3.4	2.8	5.8	364	14	5.0	3.4	2.1	4.2	9.8
24	13	6.6	2.8	3.4	184	65	38	4.6	3.4	1.9	9.1	82
25	20	6.2	2.8	4.2	468	37	35	4.6	84	15	9.8	262
26	79	6.2	5.0	4.2	31	28	18	5.0	29	6.2	2.4	96
27	12	6.2	4.6	3.8	15	20	16	4.6	3.8	2.4	2.2	20
28	7.0	5.8	3.4	3.4	19	18	7.8	4.2	6.6	2.4	1.9	8.4
29	5.8	23	3.8	2.8	---	18	10	3.0	15	2.6	2.1	5.0
30	5.4	7.7	2.8	2.4	---	14	6.2	4.6	3.4	2.6	2.4	4.6
31	102	---	2.8	2.4	---	13	---	3.8	---	2.6	2.4	---
TOTAL	1267.4	233.2	191.2	179.5	871.6	2325.0	1405.0	282.7	701.6	146.4	381.3	744.8
MEAN	40.9	7.77	6.17	5.79	31.1	75.0	46.8	9.12	23.4	4.72	12.3	24.8
MAX	286	23	46	62	468	776	578	71	225	33	110	262
MIN	2.8	5.4	2.8	2.4	2.4	6.6	6.2	3.0	3.4	1.9	1.9	1.9

CAL YR 1976 TOTAL 9526.4 MEAN 26.0 MAX 645 MIN 2.8
WTR YR 1977 TOTAL 8729.7 MEAN 23.9 MAX 776 MIN 1.9

01395000 RAHWAY RIVER AT RAHWAY, NJ

LOCATION.--Lat 40°37'05", long 74°17'00", Union County, Hydrologic Unit 02030104, on left bank 100 ft (30 m) upstream from St. Georges Avenue bridge in Rahway and 0.9 mi (1.4 km) upstream from Robinsons Branch.

DRAINAGE AREA.--40.9 mi² (105.9 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: July 1908 to April 1915 (gage heights and discharge measurements only), October 1921 to current year.

REVISED DISCHARGE RECORDS.--WSP 781: Drainage area. WSP 1552: 1922-23(M), 1924, 1930-31(M), 1937.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 8.77 ft (2.673 m) NGVD. Prior to Aug. 25, 1934, nonrecording gage at site 40 ft (12 m) downstream from Church Street and 1,500 ft (460 m) downstream from present site at datum 2.77 ft (0.844 m) lower.

REMARKS.--Discharge records poor. Water for municipal supply diverted from river by Rahway and Orange. The flow past this station is affected by diversions by pumpage from wells by Orange, South Orange, Short Hills Water Co., and Springfield station of Elizabethtown Water Co.

AVERAGE DISCHARGE.--56 years (1921-77), 46.0 ft³/s (1.302 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft³/s (17.0 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 20	2215	708	20.0	3.38	1.030	Mar. 23	0245	*2430	68.8	5.48	1.670
Feb. 25	0830	1380	39.1	4.34	1.323	Apr. 5	1330	1100	31.2	3.97	1.210

No flow part of Oct. 18, 19.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,420 ft³/s (153 m³/s) Aug. 2, 1973 (gage height, 7.88 ft or 2.402 m) from rating curve extended above 3,000 ft³/s (85 m³/s); no flow part or all of some days in many years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	29	4.0	1.0	5.4	22	9.7	6.4	42	1.4	.73	.61
2	18	12	2.9	.90	4.5	15	94	6.3	30	.70	.57	.60
3	204	10	1.7	1.8	9.0	11	181	6.9	3.8	.88	30	.56
4	46	8.0	2.0	3.2	19	186	59	14	.82	.64	35	.50
5	9.0	6.5	1.4	3.5	16	298	784	105	.87	.62	42	.50
6	.85	5.5	.50	2.5	6.4	33	185	72	2.2	.56	15	.54
7	7.0	5.5	236	3.7	5.4	24	58	18	20	.53	84	.56
8	.50	2.9	89	3.0	18	15	37	8.6	4.9	.61	48	.58
9	263	4.0	13	1.2	18	13	26	23	219	.73	13	1.5
10	153	5.5	7.5	108	11	12	21	14	282	.62	5.6	5.4
11	9.0	4.0	9.0	78	25	11	20	11	25	.59	8.6	2.5
12	21	3.6	10	14	43	9.6	18	6.1	9.8	39	1.6	.50
13	7.0	3.6	9.7	6.5	51	157	17	3.7	5.8	26	88	.50
14	1.4	2.6	5.0	5.0	59	225	13	4.2	5.5	6.2	27	.50
15	.50	2.0	3.6	11	23	42	14	3.3	5.0	.45	8.1	.50
16	.40	3.2	5.5	8.0	8.0	23	11	1.7	3.0	.59	1.5	.50
17	.40	4.0	6.5	9.6	3.5	17	11	3.0	2.2	.50	1.0	15
18	.60	4.5	5.0	7.0	2.7	70	9.8	5.6	1.4	.48	.56	7.0
19	.40	3.2	2.9	5.0	2.3	47	11	30	1.0	.28	.52	2.0
20	156	2.6	4.0	3.5	8.4	23	10	5.8	2.5	1.3	.50	6.4
21	413	2.3	36	2.6	6.9	22	10	4.4	59	.80	.49	3.5
22	26	1.4	5.5	2.2	5.7	685	10	1.9	4.8	.69	50	.80
23	9.0	1.0	4.0	2.0	6.2	1300	9.5	1.2	.42	.48	20	1.0
24	9.7	1.7	3.2	1.4	77	90	16	1.2	1.1	.44	9.0	50
25	31	2.0	1.7	22	970	47	51	1.9	61	29	24	250
26	111	2.0	4.5	7.0	100	28	14	1.1	128	25	8.0	150
27	21	2.6	6.0	14	32	23	13	1.3	6.5	2.0	3.0	45
28	10	1.0	4.5	4.8	37	[illegible]	12	.55	4.1	.63	1.7	15
29	7.5	15	2.5	11	---	19	21	.65	28	.57	.84	6.2
30	6.0	15	1.7	15	---	19	6.9	.70	3.6	.52	.56	5.5
31	145	---	1.2	21	---	15	---	.69	---	.32	.60	---
TOTAL	1701.25	166.2	490.00	379.40	1573.4	3520.6	1752.9	364.19	963.81	143.13	529.47	573.75
MEAN	54.9	5.54	15.8	12.2	56.2	114	58.4	11.7	32.1	4.62	17.1	19.1
MAX	413	29	236	108	970	1300	784	105	282	39	88	250
MIN	.40	1.0	.50	.90	2.3	9.6	6.9	.55	.82	.28	.49	.50

CAL YR 1976 TOTAL 13973.11 MEAN 38.2 MAX 732 MIN .24
WTR YR 1977 TOTAL 12158.10 MEAN 33.3 MAX 1300 MIN .28

NOTE.--No gage-height record Aug. 18 to Sept. 28.

01396000 ROBINSONS BRANCH RAHWAY RIVER AT RAHWAY, NJ

LOCATION.--Lat 40°36'20", long 74°17'57", Union County, Hydrologic Unit 02030104, on right bank of Milton Lake, 2,000 ft (610 m) upstream from Madison Avenue in Rahway, 3,200 ft (980 m) downstream from Middlesex Reservoir Dam, and 1.6 mi (2.6 km) upstream from mouth.

DRAINAGE AREA.--21.6 mi² (55.9 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: September 1939 to current year.

REVISED DISCHARGE RECORDS.--WDR-NJ-75-1: 1973(P).

GAGE.--Water-stage recorder above Milton Lake Dam. Datum of gage is 19.99 ft (6.093 m) NGVD (levels from New Jersey Geological Survey bench mark).

REMARKS.--Discharge records fair except those below 10 ft³/s (0.28 m³/s), which are poor. Records include flow over main dam, flow through bypass channel, and leakage through dam. Water diverted for municipal supply by Middlesex Water Co., from Middlesex Reservoir, capacity, 300,000,000 gal (1.136 hm³), 3,200 ft (980 m) above station (records given herein).

AVERAGE DISCHARGE.--38 years, 24.3 ft³/s (0.688 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft³/s (12.7 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 9	1430	511	14.5	4.21	1.283
Oct. 28	2230	470	13.3	4.17	1.271
Feb. 24	2230	1140	32.3	4.70	1.433
Mar. 22	1600	*1200	34.0	4.74	1.445
Apr. 5	0215	648	18.4	4.30	1.311

No flow several days in June and July.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,110 ft³/s (88.1 m³/s) July 15, 1975 (gage height, 5.85 ft or 1.783 m) from rating curve extended above 750 ft³/s (21 m³/s) on basis of flow over dam computation; maximum gage height, 6.02 ft (1.835 m) Aug. 15, 1969; no flow many times.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	18	14	1.0	6.0	8.6	4.3	5.0	7.8	1.1	2.7	2.3
2	12	9.5	7.5	.90	3.0	6.2	53	4.5	7.0	.65	4.9	2.3
3	107	7.2	5.5	2.0	4.0	5.5	73	4.5	3.7	.08	12	2.3
4	25	5.9	6.0	3.3	5.4	73	24	7.8	.65	.00	9.2	1.1
5	8.6	7.2	6.0	3.5	10	77	393	33	.65	.00	28	.32
6	7.8	8.2	4.5	2.6	4.0	13	98	21	3.2	.00	16	.86
7	6.2	8.2	114	3.7	4.9	8.6	16	8.6	8.6	.86	36	1.5
8	6.2	10	54	3.0	4.9	6.2	11	5.5	3.7	4.9	9.9	2.3
9	170	10	24	1.3	5.5	4.9	8.6	8.6	81	3.7	4.9	3.7
10	74	9.0	8.0	68	7.0	4.3	8.6	6.2	53	1.9	6.2	6.2
11	11	8.0	10	35	11	4.3	8.6	6.2	8.6	.43	9.9	3.7
12	8.6	7.5	10	15	21	4.3	8.6	5.5	4.9	12	4.3	.65
13	7.8	7.0	10	6.2	31	62	9.2	4.9	3.7	9.2	42	.24
14	7.8	6.5	4.5	5.0	28	66	7.8	3.2	3.2	.32	15	1.5
15	5.5	6.0	3.7	11	21	12	6.2	1.9	2.7	.65	7.8	.86
16	7.0	7.0	5.2	8.0	13	8.6	6.2	2.3	.86	.32	4.9	3.7
17	6.2	8.0	6.4	9.5	9.2	5.5	4.9	3.7	.43	.43	5.5	13
18	7.8	8.0	4.5	7.0	7.0	21	5.5	7.0	.65	1.1	5.5	4.9
19	4.2	7.0	3.0	5.0	7.0	17	5.8	9.2	.00	.65	3.2	.43
20	120	6.5	4.0	4.0	8.6	8.6	6.2	4.3	5.5	4.9	2.7	6.2
21	182	6.0	21	3.0	7.8	7.8	6.0	3.2	13	4.3	1.9	3.7
22	19	5.5	5.5	2.3	7.8	430	5.8	2.7	.00	1.9	39	.65
23	9.4	4.9	4.0	2.0	9.2	325	5.4	2.3	.00	.65	8.6	4.3
24	10	5.5	3.0	3.5	170	77	5.4	2.7	.00	.00	9.2	73
25	14	6.0	1.8	22	334	12	13	2.3	57	39	21	159
26	50	6.0	4.5	7.0	70	9.9	6.2	1.9	57	13	4.9	28
27	14	6.5	5.8	14	13	9.2	5.6	.86	3.2	2.3	3.2	12
28	10	4.9	4.0	5.0	15	8.6	5.4	.65	.00	.13	2.7	8.6
29	6.0	14	2.5	3.6	---	8.6	8.0	.43	3.7	.43	1.9	4.9
30	6.7	13	1.6	6.0	---	7.8	5.2	.24	.65	2.3	2.3	3.2
31	58	---	1.2	12	---	7.0	---	.43	---	3.2	2.3	---
TOTAL	1004.8	237.0	359.7	275.40	838.3	1319.5	824.5	170.61	334.39	110.40	327.6	355.41
MEAN	32.4	7.90	11.6	8.88	29.9	42.6	27.5	5.50	11.1	3.56	10.6	11.8
MAX	182	18	114	68	334	430	393	33	81	39	42	159
MIN	4.2	4.9	1.2	.90	3.0	4.3	4.3	.24	.00	.00	1.9	.24

CAL YR 1976 TOTAL 7610.98 MEAN 20.8 MAX 480 MIN .16
WTR YR 1977 TOTAL 6157.61 MEAN 16.9 MAX 430 MIN .00

NOTE.--No gage-height record Nov. 11-Jan. 18.

01396090 SOUTH BRANCH RARITAN RIVER AT OUTLET OF BUDD LAKE, NJ

LOCATION.--Lat 40°51'38", long 74°45'38", Morris County, Hydrologic Unit 02030105, at bridge on Smithtown Road, 200 ft (60 m) northwest of U.S. Route 46 and 0.5 mi (0.8 km) downstream from Budd Lake dam.

DRAINAGE AREA.--5.03 mi² (13.03 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1964, 1973 to current year.
CHEMICAL ANALYSES: Water years 1964, 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
NOV 18...	1230	171	8.1	5.0	2	12.0	2.0	40	27
FEB 03...	1330	--	6.7	1.4	2	7.2	1.0	50	240
MAR 30...	1020	154	7.3	9.0	4	13.8	1.0	<20	23
APR 20...	0955	169	6.8	14.5	4	12.0	3.0	60	2
MAY 03...	1055	171	7.2	14.0	5	11.2	2.0	--	--
JUN 02...	1050	203	6.8	19.5	20	4.2	3.0	700	920
JUL 12...	1030	198	7.9	21.0	5	4.6	2.0	790	170
AUG 01...	1045	197	7.6	19.0	5	5.2	--	80	240

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV 18...	46	12	3.8	13	1.1	14	23	94	5
FEB 03...	53	13	5.0	18	1.3	16	30	143	0
MAR 30...	48	12	4.4	13	1.2	12	23	96	11
APR 20...	83	25	5.0	13	1.2	14	23	112	9
MAY 03...	38	9.7	3.4	12	.9	14	24	93	10
JUN 02...	68	19	5.0	16	1.3	11	45	209	12
JUL 12...	50	13	4.2	15	1.3	12	27	125	27
AUG 01...	58	15	5.1	16	1.4	9.5	27	133	21

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 18...	--	--	--	--	1.5	--	--	--	26
FEB 03...	--	--	--	--	.80	--	.05	--	4.5
MAR 30...	--	--	--	--	1.7	--	.05	--	--
APR 20...	--	--	--	--	1.4	--	.03	--	5.8
MAY 03...	--	--	--	--	1.5	--	.03	--	4.2
JUN 02...	--	--	--	--	1.7	--	.05	--	6.3
JUL 12...	.15	.00	.21	.73	.94	1.1	.09	.00	8.2
AUG 01...	.15	.00	.09	1.7	1.8	2.0	.11	.01	7.2

01396180 DRAKES BROOK AT BARTLEY, NJ

LOCATION.--Lat 40°48'43", long 74°43'45", Morris County, Hydrologic Unit 02030105, at bridge on Bartley Road, 0.2 mi (0.4 km) upstream from mouth, 0.9 mi (1.4 km) southwest of Bartley, and 2.5 mi (4.0 km) northwest of Chester.

DRAINAGE AREA.--16.6 mi² (43.0 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: 1977 Water year.
CHEMICAL ANALYSES: Water years 1964-65, 1967, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
OCT 25...	1000	222	8.0	10.0	3	10.6	--	1300	540	77	18
NOV 18...	1400	276	7.3	8.0	2	10.8	1.0	<20	12	100	22
FEB 03...	1410	--	7.5	5.0	2	11.8	--	<20	4	98	21
MAR 30...	1115	229	7.7	13.0	2	10.8	1.0	<20	23	73	17
APR 20...	1115	248	8.0	12.5	2	10.5	<.5	<20	5	94	21
MAY 03...	1200	261	8.1	13.5	2	10.2	2.0	<20	5	89	21
JUN 02...	1140	254	7.7	16.5	2	7.9	2.0	490	920	120	29
JUL 12...	1135	286	8.7	14.5	1	8.2	2.0	490	1600	100	23
AUG 01...	1200	252	7.8	10.0	1	7.8	--	790	>2400	98	21

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SOCIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
OCT 25...	7.8	11	2.1	.0	17	20	13	112	9	--
NOV 18...	11	12	1.8	--	13	21	--	141	1	--
FEB 03...	11	18	1.8	--	12	28	--	180	0	--
MAR 30...	7.4	13	1.9	--	12	24	--	131	0	--
APR 20...	10	12	1.7	--	11	21	--	165	0	--
MAY 03...	8.9	14	1.7	--	12	24	--	139	5	--
JUN 02...	11	13	1.8	.0	12	24	14	164	0	--
JUL 12...	11	15	1.6	--	11	25	--	167	0	1.8
AUG 01...	11	9.4	1.4	--	8.0	14	--	153	8	2.0

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 25...	--	--	--	1.4	140	--	--	--	3.6	1.1
NOV 18...	--	--	--	1.4	--	--	--	--	3.2	--
FEB 03...	--	--	--	2.8	--	--	.33	--	6.3	--
MAR 30...	--	--	--	1.7	--	--	.04	--	--	--
APR 20...	--	--	--	1.1	--	--	.05	--	1.0	--
MAY 03...	--	--	--	1.1	--	--	.05	--	5.2	--
JUN 02...	--	--	--	1.4	--	--	.05	--	4.8	--
JUL 12...	.01	.18	.45	.63	--	2.4	.19	.16	4.9	--
AUG 01...	.05	.31	.42	.73	--	2.7	.31	.27	5.8	--

01396180 DRAKES BROOK AT BARTLEY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
OCT 25...	1000	140	110	30	0	1	60	1	<10	<10	0
JUN 02...	1140	--	--	40	1	--	30	0	--	--	0

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)
OCT 25...	0	<10	4	<10	420	180	4100	6	<10	30	250
JUN 02...	0	--	6	--	--	90	--	5	--	70	--

DATE	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT 25...	.2	.0	1	<10	0	40	10	--	0	.0
JUN 02...	.0	--	4	--	0	60	--	0	--	--

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT 25...	0	.0	.0	.0	.0	.0	.0	.0	.0	0
JUN 02...	--	--	--	--	--	--	--	--	--	--

01396280 SOUTH BRANCH RARITAN RIVER AT MIDDLE VALLEY, NJ

LOCATION.--Lat 40°45'40", long 74°49'18", Morris County, Hydrologic Unit 02030105, at bridge at Middle Valley, 6.9 mi (11.1 km) downstream from confluence with Drakes Brook.

DRAINAGE AREA.--47.6 mi² (123.3 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: 1977 Water year.
CHEMICAL ANALYSES: Water years 1964-65, 1967, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
OCT											
14...	1200	230	8.4	11.5	2	10.6	<1.0	230	350	80	17
NOV											
18...	1500	219	8.4	6.0	2	13.3	<.5	<20	130	85	19
FEB											
15...	1210	265	7.9	2.5	4	7.8	--	330	920	73	17
MAR											
30...	1200	179	7.7	13.5	3	11.8	2.0	<20	33	61	14
APR											
20...	1305	189	8.6	14.0	2	11.9	1.0	20	17	74	16
MAY											
03...	1310	197	9.2	15.0	2	16.0	2.0	20	2	60	14
JUN											
02...	1310	199	7.9	20.5	4	10.5	<.5	3500	540	74	16
JUL											
12...	1255	233	9.0	16.5	1	9.5	1.0	9200	280	87	19
AUG											
01...	1330	242	7.7	16.0	1	13.9	--	490	240	100	21

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
OCT										
14...	9.0	9.5	1.5	.6	12	17	14	131	9	--
NOV										
18...	9.2	9.2	1.3	--	12	15	--	125	6	--
FEB										
15...	7.4	23	2.6	--	14	41	--	163	16	--
MAR										
30...	6.3	11	1.5	--	13	18	--	103	10	--
APR										
20...	8.2	9.2	1.5	--	12	16	--	130	4	--
MAY										
03...	6.1	9.5	1.3	--	11	15	--	104	5	--
JUN										
02...	8.3	9.4	1.6	--	13	16	--	129	0	--
JUL										
12...	9.5	9.1	1.5	--	9.5	14	--	128	20	1.6
AUG										
01...	12	9.4	1.4	--	8.5	13	--	140	4	1.5

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT										
14...	--	--	--	1.1	150	--	--	--	4.2	.9
NOV										
18...	--	--	--	1.4	--	--	--	--	1.8	--
FEB										
15...	--	--	--	1.5	--	--	.00	--	4.3	--
MAR										
30...	--	--	--	1.7	--	--	.05	--	--	--
APR										
20...	--	--	--	1.1	--	--	.06	--	1.3	--
MAY										
03...	--	--	--	1.1	--	--	.03	--	4.7	--
JUN										
02...	--	--	--	1.4	--	--	.08	--	7.4	--
JUL										
12...	.01	.03	.15	.18	--	1.8	.13	.10	3.8	--
AUG										
01...	.01	.02	.30	.32	--	1.8	.13	.11	5.0	--

01396280 SOUTH BRANCH RARITAN RIVER AT MIDDLE VALLEY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
OCT											
14...	1200	30	30	0	2	3	20	1	0	8	0

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)
OCT										
14...	0	1	0	2	260	100	3400	2	8	20

DATE	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT										
14...	150	<.5	.0	1	2	0	10	27	0	.0

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT										
14...	2	2.0	.7	.4	.0	.0	.0	.0	.0	0

01396500 SOUTH BRANCH RARITAN RIVER NEAR HIGH BRIDGE, NJ

LOCATION.--Lat 40°40'40", long 74°52'46", Hunterdon County, Hydrologic Unit 02030105, on left bank 1.0 mi (1.6 km) northeast of High Bridge, and 4.4 mi (7.1 km) upstream from Spruce Run.

DRAINAGE AREA.--65.3 mi² (169.1 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1918 to current year. Monthly discharge only for some periods, published in WSP 1302.
CHEMICAL ANALYSES: Water years 1961-75.
SEDIMENT ANALYSES: Water years 1961, 1967-73.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: October 1918 to current year.
SPECIFIC CONDUCTANCE: October 1968 to current year.
WATER TEMPERATURES: October 1960 to current year.

REVISED DISCHARGE RECORDS.--WSP 601: 1924. WSP 781: Drainage area. WSP 1552: 1919(M), 1920(M), 1921, 1923, 1924(M), 1927-28(M), 1934(M), 1941(M).

GAGE.--Water-stage recorder, Water-quality recorder since December 1959, monitor since 1969. Concrete control since Sept. 28, 1930. Datum of gage is 282.10 ft (85.984 m) NGVD (levels from New Jersey Geological Survey bench mark). Prior to Sept. 30, 1921, reference point at same site and datum.

INSTRUMENTATION.--Temperature recorder since October 1960, water-quality monitor since October 1968.

REMARKS.--Discharge records good except those for December, January and February, which are fair. Slight diurnal fluctuation caused by small powerplant above station. Missing continuous water-quality records are the result of malfunction of sensor or sampling mechanism.

AVERAGE DISCHARGE.--59 years, 119 ft³/s (3.370 m³/s), 24.75 in/yr (629 mm/yr).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 25	0845	1790	50.7	9.28	2.829	Mar. 22	2315	*2720	77.0	10.04	3.060
Mar. 5	0045	1050	29.7	8.49	2.588	Apr. 5	1100	1070	30.3	8.52	2.597
Mar. 13	2300	1370	38.8	8.86	2.701						

Minimum discharge, 30 ft³/s (0.85 m³/s) Sept. 11, 12, 13, gage height, 5.79 ft (1.765 m).
SPECIFIC CONDUCTANCE: Maximum, 322 micromhos May 28; minimum, 96 micromhos Apr. 5.
WATER TEMPERATURES: Maximum, 27.5°C July 18, 19; minimum 0.0°C on several days during winter months.

EXTREMES FOR PERIOD OF RECORD.--
WATER DISCHARGE: Maximum discharge, 5,160 ft³/s (146 m³/s) Mar. 15, 1940 (gage height, 11.78 ft or 3.591 m) from rating curve extended above 1,600 ft³/s (45 m³/s); minimum, 6.6 ft³/s (0.19 m³/s) Oct. 11, 1930; minimum daily, 13 ft³/s (0.37 m³/s) Aug. 11, 1966.
SPECIFIC CONDUCTANCE: Maximum, 322 micromhos May 28, 1977; minimum, 45 micromhos Mar. 20, 1975.
WATER TEMPERATURES: Maximum, 28.0°C July 3, 1966; minimum, 0.0°C on many days during winter months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	164	54	46	52	179	192	135	84	51	33	36
2	79	107	59	47	51	156	252	130	102	50	38	36
3	127	93	53	50	51	139	454	130	71	47	72	35
4	111	92	95	50	52	436	242	124	63	43	106	34
5	67	93	108	52	53	642	789	250	60	47	48	34
6	58	97	109	57	50	283	422	210	61	47	40	34
7	54	86	408	56	52	228	302	162	76	52	45	33
8	51	81	246	48	51	199	270	137	66	74	52	32
9	233	75	98	70	53	177	242	172	120	56	114	32
10	157	75	92	185	55	164	232	187	323	48	61	31
11	84	72	82	140	61	154	220	147	122	42	79	31
12	67	70	76	120	91	144	197	124	87	61	50	30
13	61	67	68	103	298	513	185	116	76	60	88	30
14	56	65	63	95	353	748	178	106	69	50	90	31
15	52	63	85	88	148	316	162	100	68	45	61	31
16	49	63	74	78	69	263	155	96	64	42	48	35
17	47	62	74	71	65	225	147	94	60	38	47	66
18	45	63	71	68	66	229	140	116	60	40	48	45
19	44	61	66	65	56	249	137	116	66	41	42	40
20	77	60	70	62	55	232	130	96	61	53	40	42
21	433	59	96	64	52	210	126	88	106	48	38	61
22	134	57	82	64	52	992	124	84	74	39	66	42
23	89	55	65	56	61	1280	122	79	58	38	66	41
24	80	54	60	57	276	483	152	76	53	35	47	77
25	114	55	54	58	1220	372	299	74	120	36	61	242
26	240	54	57	59	315	327	212	68	162	39	44	124
27	131	56	58	59	234	288	330	68	76	35	39	140
28	97	55	56	58	246	267	195	66	69	34	39	84
29	86	65	55	54	---	252	170	63	72	33	38	63
30	79	68	53	52	---	228	147	64	58	34	36	53
31	221	---	51	52	---	215	---	63	---	35	35	---
TOTAL	3287	2187	2718	2184	4243	10590	6925	3541	2605	1393	1711	1645
MEAN	106	72.9	87.7	70.5	152	342	231	114	86.8	44.9	55.2	54.8
MAX	433	164	408	185	1220	1280	789	250	323	74	114	242
MIN	44	54	51	46	50	139	122	63	53	33	33	30
CFSM	1.62	1.12	1.34	1.08	2.33	5.24	3.54	1.75	1.33	.69	.85	.84
IN.	1.87	1.25	1.55	1.24	2.42	6.03	3.94	2.02	1.48	.79	.97	.94

CAL YR 1976 TOTAL 42654 MEAN 117 MAX 1250 MIN 26 CFSM 1.79 IN 24.30
WTR YR 1977 TOTAL 43025 MEAN 118 MAX 1280 MIN 30 CFSM 1.81 IN 24.51

01396500 SOUTH BRANCH RARITAN RIVER NEAR HIGH BRIDGE, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	230	218	225	150	123	136	231	207	220	235	231	232
2	227	211	218	173	151	162	235	229	232	235	224	232
3	215	203	209	188	172	178	245	231	237	231	222	226
4	201	173	185	188	178	184	257	242	248	228	217	222
5	212	192	203	187	181	---	251	241	246	223	211	219
6	225	210	218	---	---	---	254	236	247	225	212	221
7	235	225	230	---	---	---	244	140	198	225	218	222
8	238	232	235	---	---	---	167	142	156	237	217	221
9	235	139	193	---	---	---	187	169	181	237	217	225
10	168	135	148	---	---	---	197	186	191	221	210	216
11	197	170	185	---	---	---	204	196	200	232	215	224
12	208	196	203	---	---	---	203	196	201	232	219	224
13	219	208	214	---	---	---	204	181	199	250	228	243
14	222	213	219	---	---	---	213	180	197	245	223	232
15	229	215	223	---	---	---	217	204	211	223	207	216
16	231	222	227	---	---	---	213	201	209	219	207	213
17	232	223	228	---	---	---	214	211	212	217	204	212
18	234	221	228	214	208	---	216	210	213	222	194	214
19	235	226	232	218	207	213	226	216	221	221	208	215
20	237	188	225	219	208	216	226	216	222	216	208	211
21	193	124	145	223	210	217	222	204	215	217	209	213
22	181	148	163	224	213	219	235	201	220	217	193	209
23	198	178	190	226	213	221	239	221	231	220	210	217
24	209	195	203	230	217	224	235	225	232	219	209	213
25	217	191	207	235	220	226	234	223	229	217	204	209
26	199	155	179	229	220	226	226	220	223	216	208	212
27	178	158	166	232	224	229	231	218	223	226	209	216
28	188	174	183	235	225	231	228	221	225	225	217	220
29	196	188	193	236	223	229	228	222	225	221	209	216
30	204	187	198	230	216	223	235	221	227	226	210	221
31	199	130	170	---	---	---	236	227	233	224	216	220
MONTH	238	124	201	---	---	---	257	140	217	250	193	220

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	223	215	219				180	176	---	199	193	196
2	220	208	214				181	149	172	204	198	200
3	212	204	210				148	124	134	204	198	201
4	212	206	209				162	146	157	205	201	203
5	210	200	203				151	96	113	202	149	182
6	218	201	208				142	114	129	189	150	174
7	228	218	212				149	143	146	197	188	193
8	225	215	211				154	150	152	204	196	200
9	220	212	216				157	149	153	201	189	196
10	218	212	215				161	154	158	189	181	184
11	219	210	214				169	158	165	195	182	189
12	229	213	219				179	167	173	204	195	200
13	256	231	245				188	176	181	207	195	204
14	271	253	263				189	184	186	215	204	209
15	252	239	244				193	186	189	218	210	214
16	235	220	227				195	184	191	222	212	216
17	224	209	219				200	190	194	230	215	220
18	219	206	211				203	194	198	227	185	214
19	213	204	210				205	197	200	220	201	212
20	216	209	212				206	197	202	226	211	217
21	214	203	208				210	197	204	234	221	227
22	214	202	209				216	202	208	242	228	235
23	224	201	215				220	207	214	239	229	235
24	223	145	204				214	188	208	244	233	238
25	138	109	122				188	148	161	245	238	241
26	---	---	---				181	165	175	246	238	242
27	---	---	---				164	133	147	260	241	249
28	---	---	---				181	158	172	322	258	285
29	---	---	---				190	180	183	311	276	290
30	---	---	---				196	186	191	275	240	251
31	---	---	---				---	---	---	245	235	241
MONTH	271	109	214				220	96	174	322	149	218

01396500 SOUTH BRANCH RARITAN RIVER NEAR HIGH BRIDGE, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	243	226	---	216	198	208	233	223	228	234	226	229
2	---	---	---	220	204	212	238	229	232	234	224	230
3	---	---	---	223	206	216	236	178	208	231	224	228
4	---	---	---	227	213	219	188	140	154	236	220	229
5	---	---	---	226	211	219	208	161	183	235	223	228
6	---	---	---	227	209	218	223	207	214	232	222	228
7	---	---	---	220	204	211	226	205	218	233	222	228
8	---	---	---	216	200	206	218	208	213	235	223	228
9	203	180	---	202	186	195	210	156	179	237	226	231
10	174	112	132	219	204	210	170	155	160	239	229	234
11	181	136	162	218	203	213	---	---	---	243	229	236
12	198	182	191	222	190	204	---	---	---	240	230	235
13	204	196	200	211	192	205	---	---	---	243	231	237
14	210	204	207	221	201	212	---	---	---	245	234	239
15	213	208	210	225	211	219	---	---	---	247	232	238
16	216	208	213	230	216	224	213	204	---	243	220	232
17	218	211	214	229	218	225	219	210	215	228	217	224
18	221	213	217	230	217	227	219	213	217	218	210	214
19	226	220	223	235	225	229	223	209	215	232	216	225
20	225	190	214	229	213	223	227	213	220	233	228	230
21	213	180	194	224	213	219	231	214	221	230	221	227
22	206	182	193	224	213	221	225	185	205	225	218	220
23	219	206	212	232	223	227	206	176	190	227	220	225
24	226	215	219	233	220	228	206	178	194	221	201	211
25	226	119	198	238	220	230	215	193	206	201	155	175
26	158	138	149	232	214	226	200	185	195	187	156	172
27	194	160	181	232	217	228	218	200	206	189	173	181
28	203	189	198	233	214	227	222	210	217	205	182	193
29	210	197	207	235	216	225	225	218	222	218	204	210
30	210	199	203	235	223	229	228	219	224	226	212	221
31	---	---	---	237	219	228	232	226	229	---	---	---
MONTH	---	---	---	238	186	219	238	140	207	247	155	221
YEAR	322	96	209									

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	13.0	12.0	12.0	8.5	6.0	7.0	0.0	0.0	0.0	0.5	0.0	0.0
2	14.0	12.0	13.0	6.5	4.5	5.5	0.5	0.0	0.0	0.0	0.0	0.0
3	14.5	13.0	14.0	7.0	5.5	6.5	0.0	0.0	0.0	0.0	0.0	0.0
4	15.5	13.0	14.0	8.5	7.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0
5	14.0	13.0	13.5	7.5	7.0	---	0.0	0.0	0.0	0.0	0.0	0.0
6	14.5	13.0	13.5	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0
7	15.0	14.5	15.0	---	---	---	3.0	0.0	1.0	0.0	0.0	0.0
8	15.5	14.0	14.5	---	---	---	2.5	0.0	1.0	0.0	0.0	0.0
9	17.5	15.0	16.5	---	---	---	0.5	0.0	0.5	0.0	0.0	0.0
10	16.0	12.5	14.5	---	---	---	1.0	0.0	0.5	0.0	0.0	0.0
11	12.5	11.0	11.5	---	---	---	3.0	1.0	2.0	0.5	0.0	0.0
12	11.5	9.0	10.5	---	---	---	4.0	2.5	3.0	0.5	0.0	0.0
13	13.0	9.0	11.0	---	---	---	3.5	0.0	1.5	0.5	0.0	0.0
14	12.5	11.0	11.5	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0
15	12.5	9.5	11.0	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0
16	12.5	11.0	11.5	---	---	---	2.5	0.0	1.0	0.5	0.0	0.0
17	11.0	9.5	10.5	---	---	---	3.0	2.0	2.5	0.5	0.0	0.0
18	9.5	7.5	8.5	4.5	3.5	---	2.5	1.5	2.0	0.5	0.0	0.0
19	8.0	5.5	7.0	5.0	3.5	4.5	2.0	0.5	1.5	0.5	0.0	0.0
20	10.5	7.5	8.5	5.0	3.5	4.5	4.0	1.5	2.5	0.0	0.0	0.0
21	11.5	10.0	11.0	4.5	2.5	3.5	3.5	0.0	1.5	0.0	0.0	0.0
22	10.0	8.0	8.5	3.0	2.0	2.5	0.0	0.0	0.0	0.5	0.0	0.0
23	8.5	7.0	7.5	2.5	1.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
24	8.0	7.5	7.5	2.0	0.0	1.0	0.0	0.0	0.0	0.5	0.0	0.0
25	9.5	8.0	8.5	2.5	0.5	1.5	0.0	0.0	0.0	0.5	0.0	0.0
26	10.0	8.0	9.5	4.0	1.0	2.5	0.0	0.0	0.0	0.5	0.0	0.0
27	8.0	5.5	6.5	6.0	3.5	5.0	0.0	0.0	0.0	0.5	0.0	0.0
28	5.5	4.0	5.0	7.0	5.0	6.5	0.0	0.0	0.0	0.5	0.0	0.0
29	6.5	4.0	5.5	7.0	4.0	6.0	0.0	0.0	0.0	0.5	0.0	0.0
30	7.0	4.5	6.0	3.5	0.0	1.0	0.0	0.0	0.0	0.5	0.0	0.0
31	9.0	7.0	8.0	---	---	---	0.0	0.0	0.0	0.5	0.0	0.0
MONTH	17.5	4.0	10.5	---	---	---	4.0	0.0	0.5	0.5	0.0	0.0

01396500 SOUTH BRANCH RARITAN RIVER NEAR HIGH BRIDGE, NJ--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.0	0.0	0.0				11.0	10.0	---	16.0	11.5	14.0
2	0.0	0.0	0.0				9.5	7.5	8.0	15.0	13.5	14.5
3	1.0	0.5	0.5				14.0	7.5	10.0	17.0	13.0	15.0
4	1.5	0.5	1.0				11.0	7.5	9.0	15.0	12.5	13.5
5	1.0	0.5	0.5				7.5	7.0	7.0	15.0	12.0	13.0
6	1.0	0.5	0.5				8.0	6.0	7.0	18.5	14.0	16.5
7	1.0	0.5	0.5				8.0	5.5	7.0	18.5	15.5	17.0
8	0.5	0.5	0.5				9.0	7.0	7.5	16.5	13.0	14.5
9	0.5	0.5	0.5				8.0	5.0	7.0	14.0	10.5	12.0
10	1.0	0.5	0.5				9.5	5.5	7.5	12.0	9.5	11.0
11	1.0	0.5	0.5				11.5	8.0	10.0	14.0	10.5	12.0
12	0.5	0.5	0.5				15.0	10.0	12.5	16.5	11.5	14.5
13	0.5	0.5	0.5				16.5	12.5	14.5	18.5	14.5	16.0
14	1.0	0.5	0.5				17.5	13.5	15.0	18.0	13.5	15.5
15	3.5	0.5	2.0				15.0	11.0	13.0	18.0	12.5	15.0
16	2.5	0.5	2.0				14.5	10.5	12.5	18.5	13.5	15.5
17	0.5	0.5	0.5				14.5	10.5	12.5	19.5	14.0	17.5
18	0.5	0.5	0.5				15.0	10.5	13.0	21.5	17.0	19.0
19	3.0	0.5	2.0				16.0	11.0	13.5	19.0	17.0	18.5
20	3.0	2.5	3.0				15.5	13.0	14.0	20.5	16.5	18.5
21	3.0	1.0	2.0				17.0	12.5	14.5	21.5	17.5	19.5
22	3.0	0.5	1.5				18.5	14.0	16.5	21.5	17.5	19.5
23	5.5	2.5	4.0				19.5	16.5	18.0	22.5	18.0	18.0
24	5.0	0.5	3.5				16.0	11.5	14.0	22.5	18.5	20.5
25	3.0	0.5	1.5				12.0	10.5	11.0	22.5	19.0	20.0
26	---	---	---				11.0	10.5	11.0	23.0	17.0	19.5
27	---	---	---				12.0	10.0	11.0	22.0	16.5	19.0
28	---	---	---				12.5	10.5	11.5	23.0	17.0	20.0
29	---	---	---				13.5	9.0	11.5	20.5	16.5	19.0
30	---	---	---				14.5	10.0	12.5	19.0	15.5	17.5
31	---	---	---				---	---	---	20.0	14.5	17.5
MONTH	5.5	0.0	1.0				19.5	5.0	11.5	23.0	9.5	16.5

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	17.5	17.0	---	22.5	19.0	21.0	22.0	20.5	21.0	23.0	20.5	21.5
2	---	---	---	23.5	18.5	21.0	23.5	18.5	21.0	23.5	19.0	22.0
3	---	---	---	23.5	17.0	20.5	20.5	18.5	19.0	23.5	21.0	22.0
4	---	---	---	23.0	18.0	20.5	22.5	18.5	20.0	22.5	18.5	20.5
5	---	---	---	23.5	19.5	21.5	24.0	19.5	22.0	21.5	18.0	20.0
6	---	---	---	23.5	19.5	21.5	24.5	20.5	22.5	22.0	19.0	20.5
7	---	---	---	21.5	20.0	21.0	24.0	21.0	23.0	21.0	18.0	19.5
8	---	---	---	23.0	19.5	21.0	25.0	21.5	23.5	21.5	17.5	19.5
9	14.5	13.5	---	23.5	20.0	21.5	24.0	21.5	22.5	20.5	17.0	18.5
10	15.5	13.5	14.5	24.0	19.5	22.0	22.5	20.0	21.5	21.0	17.5	19.0
11	17.5	14.5	16.0	22.5	19.5	21.0	---	---	---	19.5	17.0	17.5
12	19.0	15.0	17.0	22.0	20.0	21.0	---	---	---	17.5	13.5	16.0
13	21.5	17.0	19.0	24.0	20.0	22.0	---	---	---	17.5	14.0	16.0
14	20.0	18.5	19.0	26.0	20.5	23.0	---	---	---	18.5	16.0	17.5
15	20.5	18.0	19.0	26.5	20.5	23.5	---	---	---	19.5	14.0	16.5
16	22.5	17.0	19.5	26.0	21.0	23.5	21.0	19.5	---	17.0	15.5	16.5
17	21.5	17.5	19.5	27.0	22.5	24.5	21.5	19.0	20.0	18.0	16.0	17.0
18	23.5	19.0	21.0	27.5	23.0	25.0	21.0	17.5	19.5	20.0	16.0	18.5
19	24.5	19.5	22.0	27.5	22.5	25.0	20.5	16.5	18.5	21.0	17.5	19.0
20	23.0	19.0	21.0	25.5	22.5	24.0	20.5	17.0	18.5	20.0	17.0	19.0
21	21.0	18.5	19.5	26.5	22.0	24.5	19.5	15.0	17.5	17.5	16.0	16.5
22	21.5	17.0	19.0	25.5	22.5	23.5	21.0	17.5	19.0	16.0	14.0	14.5
23	22.0	16.5	19.0	24.0	18.5	21.5	20.0	17.5	18.5	15.0	12.5	13.5
24	22.0	17.0	19.5	24.5	19.0	22.0	19.0	17.0	18.0	15.0	13.5	14.5
25	19.5	18.5	19.0	22.5	20.5	21.5	19.5	15.5	17.5	14.0	13.0	13.5
26	21.5	18.0	19.5	22.5	18.0	20.0	20.0	15.5	17.5	14.5	13.5	14.0
27	24.0	19.0	21.0	22.0	16.5	19.0	19.5	16.5	18.0	15.5	13.5	14.5
28	22.5	19.0	21.0	22.0	16.5	19.0	22.5	17.5	20.0	18.0	13.0	15.5
29	24.0	20.0	21.5	22.5	17.0	20.0	23.5	19.5	21.5	16.5	13.5	15.0
30	24.0	19.0	21.5	22.5	19.0	20.5	24.0	20.5	22.0	17.5	13.5	15.5
31	---	---	---	24.0	19.0	21.5	22.5	21.0	21.5	---	---	---
MONTH	---	---	---	27.5	16.5	22.0	25.0	15.0	20.0	23.5	12.5	17.5
YEAR	27.5	0.0	11.5									

01396520 SOUTH BRANCH RARITAN RIVER OUTLET OF LAKE SOLITUDE AT HIGH BRIDGE, NJ

LOCATION.--Lat 40°40'19", long 74°53'18", Hunterdon County, Hydrologic Unit 02030105, at bridge on Wilson Avenue in High Bridge, 150 ft (45 m) downstream from outlet of Lake Solitude and approximately 4.5 mi (7.2 km) southeast of Hampton.

DRAINAGE AREA.--67.1 mi² (173.8 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: November 1976 to September 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA+MG) (MG/L)
NOV										
10...	1100	202	7.4	5.5	2	12.0	1.0	110	5	79
FEB										
10...	1400	238	7.4	.0	1	14.0	1.0	50	2	80
MAR										
30...	1315	181	7.8	14.0	2	12.0	2.0	<20	23	57
APR										
20...	1405	202	6.3	14.5	2	10.0	<.5	80	17	73
MAY										
03...	1400	202	8.1	14.0	2	7.4	2.0	20	2	60
JUN										
02...	1400	196	7.9	19.5	3	9.1	1.0	1700	240	92
JUL										
12...	1330	235	8.0	20.0	1	9.5	<.5	230	350	98
AUG										
02...	1050	237	7.8	18.0	1	10.5	1.0	50	23	110
SEP										
21...	1000	239	7.8	13.0	2	9.3	--	20	240	91

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)
NOV										
10...	17	8.8	8.6	1.4	13	13	103	9	--	--
FEB										
10...	15	9.9	9.4	1.3	12	15	129	2	--	--
MAR										
30...	13	5.9	9.0	1.3	14	15	98	6	--	--
APR										
20...	16	8.0	7.2	1.2	13	13	127	1	--	--
MAY										
03...	14	6.0	8.6	1.2	14	14	111	12	--	--
JUN										
02...	17	12	8.0	1.5	12	13	121	5	--	--
JUL										
12...	21	11	8.0	1.5	11	12	140	19	1.2	.03
AUG										
02...	23	12	8.2	1.5	11	11	130	4	.85	.02
SEP										
21...	20	10	8.5	1.8	12	12	121	0	1.2	.01

DATE	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
NOV									
10...	--	--	1.4	--	--	--	--	1.4	--
FEB									
10...	--	--	1.1	--	--	.05	--	1.0	--
MAR									
30...	--	--	1.4	--	--	.04	--	--	--
APR									
20...	--	--	1.1	--	--	.02	--	.8	--
MAY									
03...	--	--	1.1	--	--	.01	--	6.3	--
JUN									
02...	--	--	1.4	--	--	.04	--	4.2	--
JUL									
12...	.10	.13	.23	--	1.4	.06	.04	5.1	--
AUG									
02...	.08	.32	.40	--	1.3	.06	.03	5.0	--
SEP									
21...	.10	.22	.32	540	1.5	.24	.04	7.8	3.8

01396520 SOUTH BRANCH RARITAN RIVER OUTLET OF LAKE SOLITUDE AT HIGH BRIDGE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)
SEP 21...	1000	5	<10	<10	<10	17	11000	17	680	.0	20	180

DATE	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
SEP 21...	0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0

01396535 SOUTH BRANCH RARITAN RIVER AT ARCH STREET AT HIGH BRIDGE, NJ

LOCATION.--Lat 40°39'49", long 74°53'52", Hunterdon County, Hydrologic Unit 02030105, at bridge on Arch Street in High Bridge, 0.9 mi (1.4 km) northeast of Mariannes Corner, and 4.3 mi (6.9 km) northeast of Norton.

DRAINAGE AREA.--68.8 mi² (178.2 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV										
10...	0930	208	8.4	4.0	1	12.0	1.0	80	33	82
FEB										
10...	1330	251	7.1	.0	2	12.4	1.0	220	8	87
MAR										
23...	0930	103	7.0	5.0	25	--	<.5	330	540	35
APR										
21...	1005	213	8.6	14.0	1	11.8	<.5	20	79	84
MAY										
02...	1000	199	8.3	15.0	2	12.1	--	<20	11	74
31...	0930	225	7.9	17.0	2	10.5	1.0	20	170	98
JUL										
13...	1130	220	8.1	21.0	1	10.1	<.5	940	350	89
AUG										
02...	0930	232	8.1	18.0	1	10.4	1.0	70	33	100
SEP										
08...	0930	243	7.9	16.5	1	11.3	2.0	330	240	100

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV										
10...	18	9.0	8.9	1.4	--	14	14	--	106	9
FEB										
10...	19	9.5	11	1.4	--	14	18	--	141	7
MAR										
23...	8.4	3.3	7.7	1.6	--	12	11	--	80	33
APR										
21...	18	9.4	8.7	1.3	--	14	13	--	117	5
MAY										
02...	17	7.7	9.2	1.2	--	14	13	--	131	6
31...	21	11	8.2	1.5	.0	12	13	11	162	0
JUL										
13...	20	9.5	8.4	2.0	--	12	11	--	129	44
AUG										
02...	21	12	7.9	1.4	--	10	11	--	134	1
SEP										
08...	22	12	8.4	1.6	--	10	11	--	139	7

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV									
10...	--	--	--	--	1.0	--	--	--	1.6
FEB									
10...	--	--	--	--	1.4	--	.04	--	1.2
MAR									
23...	--	--	--	--	1.1	--	.03	--	7.1
APR									
21...	--	--	--	--	1.1	--	.02	--	1.7
MAY									
02...	--	--	--	--	1.0	--	.02	--	4.9
31...	--	--	--	--	1.0	--	.03	--	5.8
JUL									
13...	1.3	.02	.07	.18	.25	1.6	.09	.05	4.2
AUG									
02...	.87	.02	.04	.28	.32	1.2	.06	.04	7.0
SEP									
08...	.94	.02	.02	.11	.13	1.1	.08	.04	8.1

01396535 SOUTH BRANCH RARITAN RIVER AT ARCH STREET AT HIGH BRIDGE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY 31...	0930	80	2	40	0	0	0	2

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY 31...	220	2	60	.0	3	0	90	3

01396590 SPRUCE RUN NEAR HIGH BRIDGE, NJ

LOCATION.--Lat 40°40'26", long 74°55'04", Hunterdon County, Hydrologic Unit 02030105, at bridge on Van Syckel Road, 3.4 mi (5.6 km) northeast of Norton, and 3.1 mi (5.0 km) south of Red Mill.

DRAINAGE AREA.--15.5 mi² (40.2 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: 1977 Water year.
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPIUCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
OCT 14...	1400	178	8.1	11.5	2	10.4	--	790	920	56	13
NOV 10...	1300	156	7.9	6.0	1	11.9	2.0	330	14	54	13
FEB 10...	1200	168	7.0	.0	1	12.6	2.0	40	<2	57	14
MAR 23...	1100	133	6.9	5.0	4	9.7	--	2400	>2400	41	10
APR 21...	1115	158	8.4	14.0	1	10.2	1.0	50	33	69	18
MAY 02...	1105	156	8.0	14.0	1	10.2	--	130	33	50	12
31...	1035	159	7.4	16.5	2	8.5	1.0	110	130	66	17
JUL 13...	1230	163	7.8	21.5	1	8.1	1.0	1100	170	53	13
AUG 02...	1200	169	7.8	18.0	1	8.8	1.0	50	170	58	14
SEP 08...	1100	172	7.4	15.0	1	9.1	1.0	50	240	61	15
21...	1200	172	7.8	12.0	0	9.9	--	40	540	58	15

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIUS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
OCT 14...	5.6	7.9	1.5	.2	25	12	19	110	7	--
NOV 10...	5.3	8.1	1.3	--	22	11	--	50	0	--
FEB 10...	5.3	8.4	1.0	--	21	12	--	108	5	--
MAR 23...	3.9	8.2	1.4	--	20	12	--	100	12	--
APR 21...	5.8	8.6	1.2	--	21	12	--	96	3	--
MAY 02...	4.8	8.4	1.2	--	22	12	--	99	2	--
31...	5.6	8.2	1.2	.0	22	11	16	116	6	--
JUL 13...	4.9	8.5	1.5	--	17	11	--	96	38	.57
AUG 02...	5.5	9.1	1.4	--	21	11	--	109	4	.61
SEP 08...	5.8	9.3	1.5	--	19	11	--	111	5	.27
21...	5.1	8.8	1.5	.0	19	12	18	97	0	.52

01396590 SPRUCE RUN NEAR HIGH BRIDGE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 14...	--	--	--	.80	100	--	--	--	2.6	2.9
NOV 10...	--	--	--	1.3	--	--	--	--	.8	--
FEB 10...	--	--	--	1.4	--	--	--	--	.6	--
MAR 23...	--	--	--	1.4	--	--	.12	--	4.9	--
APR 21...	--	--	--	.80	--	--	.03	--	1.6	--
MAY 02...	--	--	--	.60	--	--	.00	--	6.1	--
31...	--	--	--	1.1	--	--	.00	--	7.0	--
JUL 13...	.01	.03	.04	.07	--	.65	.02	.02	5.1	--
AUG 02...	.00	.00	.23	.23	--	.84	.02	.01	5.1	--
SEP 08...	.00	.01	.04	.05	--	.32	.01	.01	7.8	--
21...	.00	.00	.24	.24	--	.76	.04	.00	7.5	--

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
OCT 14...	1400	50	30	20	0	1	10	0	0	1	0
MAY 31...	1035	--	--	40	1	--	5	0	--	--	0
SEP 21...	1200	--	--	0	0	--	50	0	--	--	0

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)
OCT 14...	0	0	0	8	120	80	4900	2	5	30	180
MAY 31...	0	--	4	--	--	60	--	11	--	40	--
SEP 21...	2	--	2	--	--	60	--	10	--	30	--

DATE	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT 14...	1.3	.0	2	1	0	30	32	--	0	.0
MAY 31...	.0	--	3	--	0	50	--	1	--	--
SEP 21...	.0	--	3	--	0	20	--	0	--	--

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT 14...	0	.0	.0	.0	.0	.0	.0	.0	.0	46
MAY 31...	--	--	--	--	--	--	--	--	--	--
SEP 21...	--	--	--	--	--	--	--	--	--	--

01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, NJ

LOCATION.--Lat 40°38'51", long 74°58'09", Hunterdon County, Hydrologic Unit 02030105, at bridge on State Highway 26, 1.2 mi (2.0 km) north of Hensfoot, and 0.9 mi (1.4 km) southeast of Norton.

DRAINAGE AREA.--11.8 mi² (30.6 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: 1977 Water year.
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
OCT											
14...	1500	208	7.9	12.0	1	10.4	1.0	490	350	76	19
NOV											
10...	1400	187	7.8	2.0	1	12.3	2.0	70	130	75	19
FEB											
10...	1115	234	7.1	3.0	1	13.7	1.0	<20	2	84	21
MAR											
23...	1410	129	6.9	5.0	10	12.8	--	1300	>2400	49	13
APR											
21...	1255	165	9.1	14.0	1	8.2	--	--	--	76	19
MAY											
02...	1245	191	8.1	13.0	2	11.1	--	50	7	75	20
31...	1245	189	7.7	15.0	2	8.2	<.5	--	--	75	18
JUL											
13...	1330	188	7.5	19.0	4	8.5	1.0	5400	350	70	18
AUG											
02...	1300	208	7.4	13.0	2	10.6	--	790	540	87	22
SEP											
08...	1245	226	7.0	12.0	1	8.6	1.0	220	350	92	23
21...	1330	221	7.8	11.5	1	--	--	230	540	87	22

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
OCT										
14...	7.0	6.9	1.7	1.2	23	8.8	16	118	3	--
NOV										
10...	6.8	6.8	1.3	--	21	7.5	--	129	5	--
FEB										
10...	7.7	10	1.1	--	16	15	--	134	6	--
MAR										
23...	4.0	6.9	1.6	--	17	8.5	--	91	13	--
APR										
21...	7.0	6.1	1.2	--	18	7.4	--	97	4	--
MAY										
02...	6.2	10	1.2	--	17	13	--	126	4	--
31...	7.2	7.2	1.1	.0	14	8.2	13	131	0	--
JUL										
13...	6.0	7.4	1.6	--	15	8.0	--	114	44	.82
AUG										
02...	7.9	7.0	1.2	--	15	7.8	--	134	5	.59
SEP										
08...	8.4	7.3	1.5	--	15	6.5	--	133	3	.00
21...	7.7	8.3	2.4	.0	16	8.1	17	121	0	.84

01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT										
14...	--	--	--	.60	--	--	--	--	2.2	--
NOV										
10...	--	--	--	1.1	--	--	--	--	1.1	--
FEB										
10...	--	--	--	.80	--	--	.02	--	.8	--
MAR										
23...	--	--	--	1.1	--	--	.04	--	5.9	--
APR										
21...	--	--	--	.80	--	--	.01	--	1.8	--
MAY										
02...	--	--	--	.60	--	--	.00	--	5.2	--
31...	--	--	--	.80	--	--	.01	--	4.5	--
JUL										
13...	.01	.04	.24	.28	--	1.1	.04	.01	--	--
AUG										
02...	.05	.00	.50	.50	--	1.1	.01	.01	4.9	--
SEP										
08...	.01	.00	.11	.11	--	.12	.02	.01	7.3	--
21...	.00	.00	.24	.24	950	1.1	.02	.00	8.9	8.5

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CH6) (UG/L)
OCT											
14...	1500	30	10	20	0	--	20	0	--	--	0
MAY											
31...	1245	--	--	40	1	--	8	0	--	--	0
SEP											
21...	1330	--	--	0	0	4	30	0	<10	<10	0

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)
OCT											
14...	0	--	0	--	130	90	--	0	--	20	--
MAY											
31...	0	--	0	--	--	90	--	0	--	10	--
SEP											
21...	3	<10	1	<10	--	50	6400	9	37	20	130

DATE	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT										
14...	<.5	--	1	--	0	10	--	--	--	--
MAY										
31...	.0	--	2	--	0	100	--	2	--	--
SEP										
21...	.0	.0	6	<10	0	40	20	0	68	.0

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT										
14...	--	--	--	--	--	--	--	--	--	--
MAY										
31...	--	--	--	--	--	--	--	--	--	--
SEP										
21...	0	.0	2.2	1.8	.0	.2	.0	.0	.0	0

01396800 SPRUCE RUN AT CLINTON, NJ

LOCATION.--Lat 40°38'21", long 74°54'58", Hunterdon County, Hydrologic Unit 02030105, 1,800 ft (550 m) downstream from dam at Spruce Run Reservoir, 0.2 mi (0.3 km) north of Clinton, 0.3 mi (0.5 km) upstream from mouth, and 2.2 mi (3.5 km) southwest of High Bridge.

DRAINAGE AREA.--41.3 mi² (107.0 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1959 to current year.
CHEMICAL ANALYSES: Water years 1967 to current year.
SEDIMENT ANALYSES: Water years 1960-62.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: May 1959 to current year.
WATER TEMPERATURES: October 1968 to September 1969, January 1971 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1960 to April 1961.

GAGE.--Water-stage recorder. Concrete control since Mar. 15, 1964. Datum of gage is 193.30 ft (58.918 m) NGVD. May to Nov. 24, 1959, nonrecording gage; Nov. 25, 1959, to July 23, 1961, water-stage recorder at site 1,800 ft (550 m) upstream and at datum 1.22 ft (0.372 m) lower; July 24, 1961, to Mar. 14, 1964, water-stage recorder at site 1,500 ft (460 m) upstream at datum 1.22 ft (0.372 m) lower.

REMARKS.--Discharge records fair. Flow regulated by Spruce Run Reservoir (see Raritan River Basin, reservoirs in). Once daily water temperatures supplied by New Jersey Bureau of Water Facility Operations. Water temperatures taken at outflow of dam.

COOPERATION.--Field data and samples for laboratory analyses supplied by the New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--18 years, 59.7 ft³/s (1.691 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--
WATER DISCHARGE: Maximum, 680 ft³/s (19.3 m³/s) Mar. 5, gage height, 2.71 ft (0.826 m); minimum, 0.84 ft³/s (0.024 m³/s) Aug. 24, gage height, 1.12 ft (0.341 m).
WATER TEMPERATURES: Maximum daily, 22.0°C on several days in September; minimum daily, 0.0°C on many days during winter months.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER DISCHARGE: Maximum, 6,410 ft³/s (182 m³/s) Apr. 2, 1970, gage height, 5.17 ft (1.576 m); no flow Aug. 22 to Sept. 17, 1963, Sept. 19, 1963 to Mar. 14, 1964; Mar. 19, 1964, result of filling Spruce Run Reservoir.
WATER TEMPERATURES: Maximum daily, 24.5°C July 31, 1973; minimum daily, 0.0°C on many days during winter months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	11	18	100	73	7.5	46	44	8.7	44	126	115
2	12	10	103	90	73	6.9	87	49	11	82	30	115
3	12	10	134	80	70	6.9	230	49	30	77	57	115
4	12	10	168	65	66	8.7	115	39	12	87	9.4	119
5	12	11	48	48	51	8.1	518	126	17	101	11	138
6	12	10	57	59	51	7.5	301	155	15	106	98	151
7	12	10	37	82	48	7.5	164	95	26	95	8.7	146
8	12	10	12	61	39	7.5	159	66	16	49	8.7	142
9	13	10	11	61	39	7.5	106	82	11	33	41	134
10	12	10	11	49	39	7.5	103	73	106	70	28	138
11	12	10	11	14	32	7.5	98	35	73	80	11	134
12	12	9.4	11	16	19	8.1	106	30	25	57	48	138
13	12	8.7	10	17	13	9.4	90	55	22	6.9	119	138
14	12	9.4	11	14	8.7	9.4	90	32	22	6.3	64	142
15	12	9.4	11	14	5.8	8.1	64	14	22	39	32	151
16	22	8.7	11	14	8.1	8.1	66	14	19	77	13	151
17	32	8.1	11	14	7.5	35	48	22	44	77	12	122
18	26	8.1	11	51	7.5	32	53	41	49	92	12	98
19	24	8.1	11	82	7.5	4.8	51	75	68	109	66	112
20	18	9.4	11	77	7.5	5.3	49	53	55	109	112	130
21	13	8.1	66	59	7.5	5.3	49	46	51	109	101	101
22	12	7.5	70	46	7.5	12	49	36	30	126	41	85
23	11	7.5	68	46	7.5	51	48	24	19	155	5.8	109
24	10	17	95	46	12	122	61	33	44	155	6.3	59
25	11	33	66	36	10	106	134	32	57	146	17	11
26	12	29	49	26	7.5	66	119	30	16	55	11	7.5
27	10	19	36	33	7.5	75	138	29	29	134	42	12
28	10	19	87	39	7.5	109	101	32	44	138	85	13
29	10	9.4	103	39	---	115	70	28	39	138	85	7.5
30	11	7.5	106	53	---	106	46	28	11	138	87	8.7
31	12	---	106	73	---	151	---	22	---	138	98	---
TOTAL	425	348.3	1560	1504	732.6	1121.6	3359	1489	991.7	2829.2	1485.9	3042.7
MEAN	13.7	11.6	50.3	48.5	26.2	36.2	112	48.0	33.1	91.3	47.9	101
MAX	32	33	168	100	73	151	518	155	106	155	126	151
MIN	10	7.5	10	14	5.8	4.8	46	14	8.7	6.3	5.8	7.5

CAL YR 1976 TOTAL 22952.9 MEAN 62.7 MAX 718 MIN 6.4
WTR YR 1977 TOTAL 18889.0 MEAN 51.8 MAX 518 MIN 4.8

01396800 SPRUCE RUN AT CLINTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
NOV										
22...	1300	7.5	179	8.6	6.0	2	10.3	--	20	8
FEB										
10...	1000	44	183	7.0	3.0	1	11.2	4.0	230	23
MAR										
23...	1230	46	132	6.9	5.0	4	12.5	<.5	1300	220
APR										
21...	1345	51	165	7.6	14.0	3	10.2	2.0	50	<2
MAY										
02...	1330	53	166	7.6	14.0	3	10.2	--	<20	<2
31...	1335	26	152	7.3	13.5	2	11.0	1.0	<20	8
JUL										
13...	1415	6.9	163	7.4	21.0	1	9.0	1.0	220	<2
AUG										
02...	1400	6.3	159	7.4	22.0	2	9.1	2.0	80	<2
SEP										
08...	1330	146	163	7.3	19.0	2	7.5	2.0	50	33

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV									
22...	65	15	6.6	7.0	1.6	18	10	96	5
FEB									
10...	61	15	5.6	7.8	1.6	20	11	104	5
MAR									
23...	45	12	3.7	7.9	1.5	20	12	100	10
APR									
21...	61	14	6.4	7.3	1.5	19	10	100	6
MAY									
02...	61	16	5.2	7.8	1.6	19	11	108	10
31...	56	14	5.1	7.2	1.5	19	10	110	3
JUL									
13...	56	14	5.1	6.4	1.4	17	8.9	100	17
AUG									
02...	53	13	5.0	7.7	1.8	18	10	93	5
SEP									
08...	56	14	5.2	7.4	1.7	16	9.7	92	8

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV									
22...	--	--	--	--	1.5	--	--	--	--
FEB									
10...	--	--	--	--	1.1	--	.02	--	2.1
MAR									
23...	--	--	--	--	.80	--	.04	--	5.4
APR									
21...	--	--	--	--	.80	--	.02	--	2.2
MAY									
02...	--	--	--	--	1.1	--	.00	--	5.7
31...	--	--	--	--	.80	--	.01	--	3.9
JUL									
13...	.30	.02	.09	.14	.23	.55	.01	.00	--
AUG									
02...	.12	.03	.19	.32	.51	.66	.01	.00	4.9
SEP									
08...	.02	.01	.02	.29	.31	.34	.02	.00	6.5

01396800 SPRUCE RUN AT CLINTON, NJ--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	9.5	2.5	0.0	2.0	6.0	6.0	10.0	12.0	14.0	17.5	19.0
2	17.5	9.0	3.0	1.0	2.0	4.0	6.0	10.0	13.0	14.0	17.0	19.5
3	17.0	9.5	3.0	0.0	2.0	4.0	8.0	9.5	13.5	13.0	15.0	22.0
4	17.0	10.0	3.0	1.0	3.0	4.5	7.0	10.0	13.0	15.0	14.5	22.0
5	15.0	9.0	3.0	0.0	3.0	4.0	8.0	10.0	12.0	12.0	14.5	22.0
6	17.0	9.0	2.5	0.0	0.0	4.0	7.0	10.5	11.5	14.0	15.0	22.0
7	17.0	8.0	3.0	1.0	1.0	4.0	7.0	10.0	11.5	14.0	16.0	22.0
8	17.5	8.0	2.0	0.0	1.0	4.0	8.0	9.5	13.0	14.0	15.0	20.0
9	18.0	7.0	0.0	0.0	1.0	4.0	7.0	9.0	13.0	14.0	15.0	20.0
10	16.0	7.0	4.0	2.0	2.5	4.0	6.0	9.0	12.0	15.0	16.0	20.0
11	15.0	7.0	3.0	1.0	3.0	4.5	8.0	10.0	12.0	15.0	15.5	20.0
12	15.0	6.5	3.5	1.0	3.0	5.0	8.0	10.0	12.0	15.0	16.0	20.0
13	15.0	6.0	3.0	0.0	3.0	6.0	12.0	10.5	12.0	15.0	16.0	19.0
14	15.0	6.5	0.5	0.0	3.0	6.0	10.0	10.5	12.5	15.0	16.0	19.0
15	15.0	6.0	1.5	1.0	3.0	5.0	9.0	12.0	12.5	14.0	14.0	19.0
16	13.0	7.0	2.0	1.0	2.5	6.0	10.0	11.5	12.0	14.5	14.0	18.0
17	14.0	6.0	2.5	0.0	2.5	5.0	10.0	12.0	12.0	14.5	16.0	18.0
18	13.0	6.0	2.0	2.0	2.0	6.0	9.5	12.0	13.0	15.0	14.5	18.5
19	13.5	6.0	1.5	1.0	3.0	6.0	10.0	13.0	14.0	15.0	14.0	19.5
20	13.0	6.0	2.0	3.0	2.0	6.0	9.5	12.5	14.0	15.0	14.5	19.5
21	12.0	5.0	2.0	1.0	2.5	6.0	10.0	12.5	13.0	15.0	14.0	19.0
22	12.0	5.0	0.5	1.0	2.5	6.0	14.0	13.0	14.0	15.0	16.0	19.0
23	12.0	4.5	1.0	2.0	3.0	5.0	14.0	13.0	14.0	16.0	14.5	19.0
24	11.5	4.5	2.0	2.0	3.0	5.0	12.0	13.0	14.0	15.0	15.0	19.0
25	12.0	3.5	1.5	1.0	3.0	3.5	13.0	13.5	14.0	15.5	14.5	18.0
26	11.5	4.5	2.0	1.0	3.0	4.5	9.0	12.5	13.0	13.0	14.5	18.0
27	10.0	4.5	1.5	1.0	3.0	5.0	9.0	12.0	13.0	15.5	14.0	18.0
28	10.0	5.0	2.0	2.0	8.0	5.0	10.5	13.0	14.0	15.0	16.0	18.0
29	10.0	5.0	2.0	2.0	---	5.5	9.0	12.0	14.0	15.5	17.0	17.0
30	7.0	4.0	1.5	3.0	---	6.0	10.0	12.0	14.0	15.5	18.5	17.5
31	9.0	---	2.0	0.0	---	6.0	---	12.0	---	16.5	18.5	---
MONTH	14.0	6.5	2.0	1.0	2.5	5.0	9.0	11.5	13.0	14.5	15.5	19.5
YEAR	MAX	22.0	MIN	0.0	MEAN	9.5						

01397000 SOUTH BRANCH RARITAN RIVER AT STANTON, NJ

LOCATION.--Lat 40°34'21", long 74°52'10", Hunterdon County, Hydrologic Unit 02030105, on right bank at downstream side of highway bridge at Stanton, and 0.4 mi (0.6 km) upstream from Prescott Brook.

DRAINAGE AREA.--147 mi² (381 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: July 1903 to December 1906, water years 1919 to current year. Monthly discharge only for some periods published in WSP 1302.
CHEMICAL ANALYSES: Water years 1960 to current year.
SEDIMENT ANALYSES: Water years 1960-65, 1967-73.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: July 1903 to December 1906, July 1919 to current year.
SPECIFIC CONDUCTANCE: November 1968 to current year.
WATER TEMPERATURES: December 1959 to September 1962, November 1968 to current year.
SUSPENDED-SEDIMENT DISCHARGE: December 1959 to February 1965.

REVISED DISCHARGE RECORDS.--WSP 561: Drainage area. WSP 1552: 1904, 1922-24(M), 1928-29(M), 1933-35(M).

GAGE.--Water-stage recorder. Datum of gage is 125.01 ft (38.103 m) NGVD. Prior to Aug. 17, 1925, nonrecording gage on downstream side of highway bridge at same site and datum.

INSTRUMENTATION.--Temperature recorder from December 1959 to September 1962, water-quality recorder since November 1968.

REMARKS.--Discharge records good. Flow regulated by Spruce Run Reservoir since September 1963 (see Raritan River Basin, reservoirs in). Occasional regulation at low flows by ponds above station. Slight diurnal fluctuation caused by small powerplants above station. Water diverted by Hamden Pumping Station, 4.01 mi (6.4 km) upstream, into Round Valley Reservoir since February 1966 (see Raritan River Basin, diversions).

AVERAGE DISCHARGE.--61 years (1904-6, 1920-77) 239 ft³/s (6.768 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--
WATER DISCHARGE: Maximum discharge, 3,330 ft³/s (94.3 m³/s) Mar. 22, gage height, 7.45 ft (2.271 m); minimum, 49 ft³/s (1.39 m³/s) Aug. 2.
WATER TEMPERATURES: Minimum, 0.0°C on many days during winter months.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER DISCHARGE: Maximum discharge, 18,000 ft³/s (510 m³/s) Aug. 19, 1955 (gage height, 15.22 ft or 4.639 m) from rating curve extended above 6,400 ft³/s (180 m³/s) on basis of computation of flow over Clinton Dam, 6.5 mi (10.5 km) upstream, at gage height 10.72 ft (3.269 m) contracted-opening measurement 1.7 mi (2.7 km) downstream, and slope-area measurement 0.4 mi (0.6 km) downstream, at gage height 15.22 ft (4.639 m), adjusted to present site; minimum, 9 ft³/s (0.25 m³/s) Nov. 7, 1931; minimum daily, 12 ft³/s (0.34 m³/s) Oct. 18, 1963.
SPECIFIC CONDUCTANCE: Maximum, 407 micromhos Feb. 5, 1971; minimum, 67 micromhos Aug. 28, 1971.
WATER TEMPERATURES: Maximum, 29.0°C July 2, 1961; minimum, 0.0°C on many days during winter months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	254	98	140	175	289	345	223	114	100	165	157
2	129	151	174	145	170	245	388	220	149	146	70	157
3	140	132	220	140	165	215	930	223	132	137	132	154
4	171	127	207	125	155	464	474	201	102	139	144	154
5	102	127	116	110	150	943	1890	440	100	154	70	174
6	86	132	134	115	145	397	1150	459	104	165	127	192
7	81	121	374	120	145	313	709	317	130	168	79	195
8	77	114	420	115	135	275	627	247	112	151	70	183
9	240	108	171	140	135	247	500	301	149	104	139	171
10	271	100	168	162	135	237	454	317	489	121	114	171
11	125	104	121	333	135	237	420	230	261	130	112	168
12	100	100	116	210	190	217	397	195	149	227	88	165
13	92	96	116	185	570	440	353	214	130	132	204	165
14	88	94	110	165	696	1220	337	174	118	81	189	174
15	81	92	144	140	211	500	290	151	116	85	114	180
16	83	90	104	125	166	397	282	139	112	127	72	192
17	94	88	102	115	397	357	250	141	118	121	69	207
18	90	90	98	160	499	374	243	159	130	130	69	151
19	83	90	98	200	193	349	240	247	144	154	90	146
20	100	86	100	195	120	321	227	189	141	168	157	183
21	539	85	189	175	117	290	223	168	180	165	146	174
22	201	83	174	150	110	1300	217	149	141	159	130	130
23	127	81	210	140	121	1990	210	130	90	189	94	154
24	112	83	214	140	530	862	233	134	112	192	62	162
25	141	106	195	130	1810	670	515	130	210	195	76	321
26	301	102	125	120	538	570	393	127	279	96	69	171
27	192	90	130	125	369	494	590	121	127	171	66	177
28	139	92	180	135	369	494	366	121	134	168	130	121
29	123	94	150	130	---	494	297	116	162	168	125	86
30	114	100	140	150	---	474	237	114	98	168	127	72
31	243	---	130	170	---	479	---	114	---	165	132	---
TOTAL	4571	3212	5028	4705	8651	16154	13787	6211	4533	4576	3431	5007
MEAN	147	107	162	152	309	521	460	200	151	148	111	167
MAX	539	254	420	333	1810	1990	1890	459	489	227	204	321
MIN	77	81	98	110	110	215	210	114	90	81	62	72

CAL YR 1976 TOTAL 82796 MEAN 226 MAX 2660 MIN 66
WTR YR 1977 TOTAL 79866 MEAN 219 MAX 1990 MIN 62

01397000 SOUTH BRANCH RARITAN RIVER AT STANTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
NOV 15...	1200	92	229	8.5	4.0	2	13.9	--	80	33
FEB 24...	1430	530	246	7.0	3.5	8	16.4	3.0	>24000	23
MAR 28...	1100	494	--	7.1	7.5	3	12.0	--	80	49
APR 11...	1055	420	177	7.7	14.0	5	12.3	--	20	2
MAY 04...	1115	204	202	8.6	12.0	2	11.8	1.0	110	14
JUN 06...	1000	92	217	7.7	18.5	3	10.8	--	130	79
JUL 11...	1300	130	199	8.6	20.0	1	10.1	--	790	>2400
AUG 03...	1235	121	183	7.7	20.0	1	12.5	2.0	170	350
SEP 07...	1230	189	187	--	19.0	1	10.1	1.0	70	46

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV 15...	89	20	9.5	9.3	1.5	17	14	146	5
FEB 24...	80	18	8.4	12	2.2	17	20	155	15
MAR 28...	64	15	6.4	9.5	1.8	18	14	101	4
APR 11...	64	16	5.8	9.0	1.5	19	13	128	15
MAY 04...	76	18	7.5	9.1	1.6	16	12	118	9
JUN 06...	89	20	9.5	9.0	1.7	16	13	134	5
JUL 11...	75	18	7.2	8.1	1.6	17	12	120	6
AUG 03...	77	18	7.7	8.2	1.7	14	11	122	6
SEP 07...	68	17	6.2	8.5	1.7	19	11	101	4

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 15...	--	--	--	--	1.4	--	--	--	1.8
FEB 24...	--	--	--	--	1.4	--	.13	--	2.6
MAR 28...	--	--	--	--	1.4	--	.06	--	--
APR 11...	--	--	--	--	1.1	--	.01	--	1.4
MAY 04...	--	--	--	--	1.4	--	.01	--	8.0
JUN 06...	--	--	--	--	1.4	--	.02	--	4.9
JUL 11...	.73	.03	.07	.49	.56	1.3	.06	.05	7.3
AUG 03...	.58	.06	.08	.39	.47	1.1	.07	.04	5.4
SEP 07...	.35	.03	.05	.27	.32	.70	.06	.03	9.5

01397000 SOUTH BRANCH RARITAN RIVER AT STANTON, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	206	197	201	200	168	177	229	222	227	203	191	197
2	216	207	213	186	172	179	227	199	207	212	189	200
3	219	215	216	200	187	192	203	193	200	212	190	201
4	213	202	206	205	201	203	195	187	190	215	209	212
5	202	192	197	211	204	206	215	198	209	214	206	210
6	211	197	204	213	206	209	216	179	207	220	200	212
7	221	213	217	212	208	210	227	184	212	211	193	202
8	226	221	224	212	208	210	175	156	161	217	195	207
9	229	206	222	213	210	212	170	161	164	217	199	207
10	204	177	185	216	213	214	190	169	182	225	202	212
11	186	177	180	219	213	206	199	192	196	328	234	286
12	200	187	193	222	219	221	210	201	206	297	260	273
13	211	201	205	223	220	221	211	200	207	267	255	261
14	214	211	212	225	223	224	213	198	206	262	255	258
15	219	215	216	225	221	223	221	202	212	263	258	260
16	220	218	219	227	223	225	224	221	222	269	258	264
17	220	211	214	228	224	226	224	222	223	260	246	251
18	214	209	212	230	226	228	223	220	222	253	247	250
19	215	212	214	233	226	229	225	222	223	247	219	226
20	218	207	214	233	227	230	228	225	227	223	217	220
21	215	161	186	236	228	232	230	200	220	224	216	221
22	172	162	166	233	227	230	218	202	207	225	221	224
23	188	175	182	232	226	230	211	199	206	226	223	---
24	200	189	195	232	226	229	209	193	201	---	---	---
25	208	201	206	230	222	224	215	190	204	---	---	---
26	206	189	201	222	216	219	221	172	211	---	---	---
27	201	190	195	223	218	220	231	171	197	---	---	---
28	203	193	197	228	220	224	209	180	194	---	---	---
29	216	204	209	228	219	223	211	197	208	---	---	---
30	225	216	220	230	226	228	207	193	199	---	---	---
31	223	201	217	---	---	---	205	188	194	---	---	---
MONTH	229	161	204	236	168	217	231	156	205	---	---	---

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---				---	---	---	176	169	173
2	---	---	---				---	---	---	181	175	178
3	193	188	---				---	---	---	182	176	179
4	194	188	190				---	---	---	184	180	182
5	201	189	196				---	---	---	182	169	176
6	215	199	207				---	---	---	170	159	164
7	200	192	197				---	---	---	175	166	170
8	202	193	198				---	---	---	179	174	177
9	208	200	204				---	---	---	180	175	177
10	204	198	201				---	---	---	178	172	174
11	219	205	212				---	---	---	177	172	174
12	242	210	231				---	---	---	186	177	181
13	244	219	233				180	172	---	189	183	186
14	251	219	237				183	172	177	194	184	190
15	253	248	251				190	175	185	202	190	195
16	247	238	244				189	185	186	206	199	203
17	253	236	244				192	187	189	209	199	202
18	246	231	238				193	188	191	207	201	204
19	235	225	231				193	189	191	201	197	199
20	229	222	225				195	190	192	204	195	199
21	237	225	233				194	189	191	206	197	202
22	239	225	231				196	189	193	202	192	197
23	229	219	225				198	192	194	204	196	199
24	220	170	211				198	189	195	205	198	202
25	171	138	154				191	161	174	205	201	202
26	---	---	---				168	161	164	206	201	203
27	---	---	---				169	149	159	205	200	204
28	---	---	---				155	147	150	209	188	---
29	---	---	---				161	155	158	209	203	205
30	---	---	---				169	161	164	207	203	205
31	---	---	---				---	---	---	207	205	206
MONTH	253	138	218				---	---	---	209	159	190

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	208	204	206	217	208	211	174	167	170	187	179	184
2	208	204	206	208	191	197	195	156	176	187	182	185
3	206	194	199	194	188	191	205	183	191	187	182	185
4	199	192	197	193	185	189	202	188	197	187	180	184
5	204	201	203	192	185	188	199	189	194	186	175	181
6	209	200	205	190	185	187	191	170	185	180	175	177
7	211	207	209	191	186	189	---	---	---	181	175	178
8	220	207	211	204	184	195	---	---	---	179	173	177
9	219	207	212	210	201	206	---	---	---	188	170	180
10	208	159	183	208	197	203	---	---	---	190	181	187
11	167	157	---	197	190	193	---	---	---	191	184	188
12	---	---	---	196	124	179	---	---	---	189	179	186
13	---	---	---	179	124	155	---	---	---	190	184	187
14	---	---	---	191	181	186	---	---	---	191	183	188
15	---	---	---	197	189	193	---	---	---	189	181	186
16	---	---	---	196	178	184	202	194	---	190	185	187
17	---	---	---	185	180	182	212	203	207	204	191	196
18	---	---	---	185	181	183	218	210	214	205	199	202
19	---	---	---	183	177	180	222	209	219	201	192	197
20	---	---	---	180	175	177	208	181	192	195	189	191
21	---	---	---	181	178	180	187	181	184	200	192	194
22	---	---	---	183	178	181	191	183	186	203	199	201
23	---	---	---	180	167	173	215	193	207	203	192	198
24	---	---	---	174	168	170	221	211	217	201	191	197
25	---	---	---	174	166	170	222	209	217	215	182	201
26	---	---	---	196	169	178	220	200	212	184	178	181
27	---	---	---	199	171	179	224	208	220	190	169	181
28	---	---	---	175	170	173	220	186	198	194	189	192
29	---	---	---	175	167	171	193	187	189	200	193	196
30	204	194	---	175	171	173	194	186	190	212	201	206
31	---	---	---	177	170	174	192	185	185	---	---	---
MONTH	---	---	---	217	124	184	---	---	---	215	169	189
YEAR	328	124	201									

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	14.5	14.0	14.0	8.0	6.0	7.0	0.5	0.0	0.0	0.5	0.0	0.5
2	15.0	14.0	14.5	6.5	4.0	5.5	1.5	0.0	0.5	0.5	0.0	0.5
3	15.5	14.0	14.5	6.5	5.5	6.0	0.5	0.0	0.0	0.5	0.0	0.0
4	16.5	13.5	15.0	8.0	6.0	7.0	1.5	0.5	1.0	1.0	0.0	0.5
5	15.0	14.5	15.0	7.0	5.5	6.5	1.5	0.0	0.5	0.5	0.0	0.0
6	16.5	15.0	15.5	6.5	4.0	5.5	1.5	0.0	0.5	0.5	0.0	0.0
7	17.0	15.0	16.0	6.5	4.5	5.5	3.0	1.0	2.0	0.5	0.0	0.0
8	18.0	16.0	17.0	5.5	2.5	4.0	1.5	0.0	0.5	0.0	0.0	0.0
9	18.5	16.0	17.0	3.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
10	16.0	13.0	14.0	4.5	2.5	3.5	1.0	0.0	0.5	0.5	0.0	0.0
11	13.5	11.0	12.5	4.5	2.5	3.5	1.5	0.5	1.0	0.5	0.0	0.0
12	13.0	9.0	11.5	4.5	2.5	3.5	2.0	1.0	1.5	0.0	0.0	0.0
13	13.5	10.0	12.0	4.0	2.0	3.0	1.5	0.0	0.5	0.0	0.0	0.0
14	13.0	11.0	12.0	4.0	2.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
15	13.0	9.0	11.0	4.0	2.0	3.0	0.5	0.0	0.0	0.5	0.0	0.0
16	13.0	11.5	12.5	4.0	1.5	2.5	1.0	0.0	0.5	0.0	0.0	0.0
17	11.5	10.5	11.0	4.0	1.5	2.5	1.5	0.5	1.0	0.0	0.0	0.0
18	10.0	8.0	9.0	5.0	2.5	3.5	1.5	0.5	1.0	0.0	0.0	0.0
19	9.0	6.0	8.0	5.0	2.5	4.0	2.0	0.0	1.0	0.0	0.0	0.0
20	10.5	8.5	9.0	4.5	3.0	3.5	2.5	1.0	1.5	0.5	0.0	0.0
21	11.0	10.0	10.5	4.0	2.0	3.0	2.0	0.0	1.0	0.5	0.0	0.0
22	9.5	8.0	8.5	3.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
23	8.5	6.0	7.5	2.0	0.5	1.0	0.5	0.0	0.0	0.5	0.0	---
24	8.0	7.5	7.5	1.5	0.0	1.0	0.5	0.0	0.0	---	---	---
25	9.0	8.0	8.5	2.0	0.5	1.0	0.5	0.0	0.0	---	---	---
26	9.5	8.0	9.0	3.5	0.5	2.0	1.0	0.0	0.5	---	---	---
27	7.5	5.5	6.5	6.0	3.0	4.5	0.0	0.0	0.0	---	---	---
28	6.0	4.5	5.5	6.5	4.5	5.5	0.0	0.0	0.0	---	---	---
29	6.5	3.5	5.0	6.0	2.5	5.0	1.0	0.0	0.5	---	---	---
30	7.0	4.0	5.5	2.0	0.0	1.0	0.5	0.0	0.0	---	---	---
31	8.5	6.5	7.5	---	---	---	0.5	0.0	0.5	---	---	---
MONTH	18.5	3.5	11.0	8.0	0.0	3.5	3.0	0.0	0.5	---	---	---

01397000 SOUTH BRANCH RARITAN RIVER AT STANTON, NJ--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---				---	---	---	18.0	12.0	15.0
2	---	---	---				---	---	---	16.5	14.0	15.5
3	1.0	0.5	---				---	---	---	19.0	14.0	16.5
4	1.0	0.5	0.5				---	---	---	16.0	13.5	14.5
5	1.0	0.5	0.5				---	---	---	16.0	13.0	14.5
6	1.0	0.5	0.5				---	---	---	20.0	15.0	17.0
7	1.0	0.5	0.5				---	---	---	19.5	17.5	18.5
8	1.0	0.5	0.5				---	---	---	18.5	14.5	16.5
9	1.0	0.5	0.5				---	---	---	16.0	12.0	13.5
10	1.0	0.5	1.0				---	---	---	14.0	10.5	12.0
11	1.0	0.5	1.0				---	---	---	16.5	11.0	13.5
12	1.0	0.5	1.0				---	---	---	18.5	12.0	15.5
13	1.0	0.5	1.0				18.0	15.5	---	20.0	15.0	17.5
14	1.5	0.5	1.0				18.0	14.0	15.5	19.5	15.0	17.0
15	1.5	1.0	1.5				16.5	12.0	14.0	20.0	14.0	17.0
16	2.0	0.5	1.0				16.0	11.5	13.5	20.5	15.0	18.0
17	1.0	0.5	0.5				16.5	11.0	13.5	22.5	16.5	18.5
18	1.0	0.5	0.5				17.0	11.5	14.5	23.0	19.0	20.5
19	2.0	0.5	1.0				18.0	12.5	15.5	22.0	20.0	21.0
20	1.5	1.0	1.0				17.5	14.0	15.5	23.0	18.5	20.5
21	2.0	0.5	1.0				18.5	13.5	16.0	23.0	19.5	21.0
22	2.0	0.5	1.0				21.0	15.0	18.0	24.5	19.5	22.0
23	4.5	1.0	2.5				21.5	18.0	19.5	24.5	20.0	22.5
24	2.5	1.5	2.0				18.0	13.0	15.5	25.0	21.0	23.0
25	3.0	1.5	2.0				13.5	12.0	12.5	24.5	21.5	23.0
26	---	---	---				12.0	11.5	12.0	25.0	20.5	22.5
27	---	---	---				13.5	10.5	12.0	25.0	19.5	22.0
28	---	---	---				14.5	11.5	12.5	24.5	19.5	---
29	---	---	---				15.0	10.0	12.5	23.5	20.0	22.0
30	---	---	---				16.5	10.5	13.5	22.5	18.5	20.5
31	---	---	---				---	---	---	23.0	17.5	20.5
MONTH	4.5	0.5	1.0				---	---	---	25.0	10.5	18.5

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	20.5	19.0	19.5	24.5	21.5	23.0	23.0	21.0	21.5	24.5	22.0	23.0
2	23.5	18.5	20.5	24.0	20.0	22.0	26.0	19.5	22.5	26.0	22.5	24.0
3	22.5	18.5	20.5	24.5	18.5	21.5	23.0	20.5	22.0	25.5	23.0	24.0
4	23.0	16.5	19.5	23.5	19.5	21.5	25.5	20.5	22.5	24.5	21.5	23.0
5	23.0	18.5	20.0	23.5	19.0	21.5	28.0	22.5	25.0	23.5	21.5	22.5
6	20.0	16.5	18.5	23.0	19.5	21.0	26.0	24.0	25.0	24.5	22.0	23.0
7	18.0	16.0	17.0	21.5	18.5	19.5	---	---	---	24.0	21.5	23.0
8	19.5	14.5	16.5	24.0	18.5	21.0	---	---	---	23.0	20.5	21.5
9	17.0	15.5	16.5	25.5	21.5	23.5	---	---	---	22.0	19.0	21.0
10	16.5	14.5	15.5	25.5	21.5	23.5	---	---	---	22.5	19.5	21.5
11	16.5	15.0	---	22.5	21.0	21.5	---	---	---	21.0	18.0	19.0
12	---	---	---	21.5	19.5	20.5	---	---	---	19.5	15.5	18.0
13	---	---	---	27.5	21.5	24.0	---	---	---	20.0	17.0	18.5
14	---	---	---	29.5	23.0	26.0	---	---	---	20.0	18.0	19.0
15	---	---	---	29.5	23.0	26.0	---	---	---	19.0	16.5	18.0
16	---	---	---	27.5	23.0	25.0	23.0	21.0	---	18.5	17.5	18.0
17	---	---	---	28.0	23.0	25.5	23.0	21.5	22.0	21.0	18.0	19.0
18	---	---	---	28.0	23.5	25.5	22.5	19.0	21.0	22.5	18.5	20.5
19	---	---	---	26.5	22.0	24.5	22.0	17.5	20.0	22.5	19.5	21.5
20	---	---	---	24.5	22.0	23.0	21.0	17.5	19.0	22.0	19.0	20.5
21	---	---	---	26.0	21.5	24.0	20.0	16.0	18.0	18.5	17.5	18.0
22	---	---	---	26.0	21.5	23.5	21.5	17.5	19.0	18.0	16.5	17.0
23	---	---	---	23.5	18.5	21.5	21.5	17.5	19.5	18.0	16.5	17.0
24	---	---	---	24.0	19.0	21.5	20.5	18.0	19.0	18.0	16.5	17.0
25	---	---	---	22.5	20.0	21.0	22.0	16.5	19.0	16.5	14.0	15.0
26	---	---	---	24.0	18.0	21.5	22.5	16.5	19.5	17.0	14.0	15.0
27	---	---	---	23.0	18.0	21.0	22.5	18.0	20.5	17.0	15.5	16.0
28	---	---	---	23.0	18.0	20.5	23.5	19.0	21.0	18.5	15.0	16.5
29	---	---	---	23.0	18.0	21.0	24.5	20.5	22.5	17.5	15.0	16.0
30	26.5	23.5	---	23.0	20.0	21.5	25.5	21.5	23.5	19.0	15.5	17.0
31	---	---	---	24.5	19.5	22.0	24.0	22.5	23.0	---	---	---
MONTH	---	---	---	29.5	18.0	22.5	---	---	---	26.0	14.0	19.5
YEAR	29.5	0.0	11.5									

01397045 ROUND VALLEY RESERVOIR NEAR NORTH TOWER NEAR LEBANON, NJ

LOCATION.--40°37'36", long 74°50'00", Hydrologic Unit 02030105, approximately 1200 ft (366 m) south of North Tower, 1.0 mi (1.6 km) south of Lebanon and 4.3 mi (6.9 km) southwest of McCrea Mills.

PERIOD OF RECORD.--
CHEMICAL ANALYSES: September 1977.

REMARKS.--Station was sampled as part of a project to study the effects of supplemental releases from Round Valley Reservoir to the South Branch Rockaway Creek. For each of three sections, field parameters were determined at depth intervals of 20 ft. Each point is differentiated by time and sampling depth. Water phase samples were composited, and the composite analysis is reported at 1425. Bottom samples from each of the three sections were composited, and the analysis is reported at 1430.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
SEP							
14...	1105	5.0	166	7.9	22.0	9.0	.7
14...	1110	25	166	8.0	22.0	8.8	1.3
14...	1115	45	147	7.5	12.5	11.0	.7
14...	1120	65	147	7.2	11.0	7.4	.9
14...	1300	5.0	147	7.8	21.0	9.0	.9
14...	1305	25	149	7.7	22.0	9.0	.8
14...	1310	45	147	7.7	13.0	10.6	.7
14...	1315	65	146	7.6	12.0	8.6	.6
14...	1320	85	147	7.6	10.5	9.0	.8
14...	1400	5.0	150	7.6	22.0	9.0	.9
14...	1405	25	149	8.0	22.0	9.4	.8
14...	1410	45	162	7.0	13.0	11.2	1.4
14...	1415	65	155	6.6	9.0	8.0	1.0
14...	1420	85	184	6.8	8.5	6.6	1.1

DATE	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
SEP							
14...	<1	84	59	0	48	1.2	--
14...	<1	83	44	0	36	.7	--
14...	<1	<1	49	0	40	2.5	--
14...	82	81	59	0	48	6.0	--
14...	81	84	63	0	52	1.6	6.2
14...	<1	84	51	0	42	1.6	--
14...	<1	83	54	0	44	1.7	--
14...	<1	82	51	0	42	2.0	--
14...	<1	<1	51	0	42	2.0	--
14...	<1	81	49	0	40	2.0	6.8
14...	<1	<1	51	0	42	.8	--
14...	<1	<1	49	0	40	7.8	--
14...	82	82	51	0	42	20	--
14...	81	83	51	0	42	13	6.2

DATE	TIME	NUMBER OF SAMPLING POINTS	SPECIFIC CONDUCTANCE (MICROMHOS)	TURBIDITY (JTU)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
SEP												
14...	1425	14	146	1	10	60	15	5.5	5.7	1.7	19	8.2

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DISSOLVED ORGANIC CARBON (C) (MG/L)
SEP											
14...	84	0	.05	.00	.00	.16	.16	.00	.00	7.9	5.9

01397045 ROUND VALLEY RESERVOIR NEAR NORTH TOWER NEAR LEBANON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
SEP											
14...	0	0	0	0	2	10	8	10	.5	2	0

DATE	TIME	COD IN BOTTOM MA-TERIAL (MG/KG)	TOTAL NITRITE PLUS NITRATE IN BOT. MAT. (MG/KG)	TOTAL AMMONIA NITRO-GEN IN BOTTOM MAT. (MG/KG)	TOTAL KJEL. NITRO-GEN IN BOTTOM MAT. (MG/KG)	TOTAL NITRO-GEN IN BOTTOM MATERI-AL (N) (MG/KG)	TOTAL PHOS-PHORUS IN BOT-TOM MA-TERIAL (MG/KG)	ORGANIC CARBON IN BOT-TOM MA-TERIAL (C) (G/KG)	IN-ORGANIC CARBON IN BOT-TOM MA-TERIAL (G/KG)	TOTAL ARSENIC IN BOTTOM MA-TERIAL (UG/G)
SEP										
14...	1430	59000	1.1	42	11000	11000	63	74	.1	18

DATE	TOTAL CADMIUM IN BOTTOM MA-TERIAL (UG/G)	TOTAL CHRO-MIUM IN BOTTOM MA-TERIAL (UG/G)	TOTAL COBALT IN BOTTOM MA-TERIAL (UG/G)	TOTAL COPPER IN BOTTOM MA-TERIAL (UG/G)	TOTAL IRON IN BOTTOM MA-TERIAL (UG/G)	TOTAL LEAD IN BOTTOM MA-TERIAL (UG/G)	TOTAL MANGA-NESE IN BOTTOM MA-TERIAL (UG/G)	TOTAL MERCURY IN BOTTOM MA-TERIAL (UG/G)	TOTAL NICKEL IN BOTTOM MA-TERIAL (UG/G)	TOTAL ZINC IN BOTTOM MA-TERIAL (UG/G)
SEP										
14...	<10	330	80	200	140000	30	3500	.0	100	210

01397100 PRESCOTT BROOK AT ROUND VALLEY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUM-INUM (AL) (UG/L)	SUS-PENDED ALUM-INUM (AL) (UG/L)	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)
JUN									
06...	1150	120	90	30	1	30	0	0	0

DATE	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JUN									
06...	3	300	20	4	100	.0	5	0	30

01397100 PRESCOTT BROOK AT ROUND VALLEY, NJ

LOCATION.--Lat 40°36'28", long 74°50'54", Hunterdon County, Hydrologic Unit 02030105, at bridge on unnamed road at Round Valley, 3.3 mi (5.3 km) west of Whitehouse Station, and 4.1 mi (6.6 km) upstream from mouth.

DRAINAGE AREA.--4.61 mi^2 (11.94 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1959-62, 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 08...	1430	196	7.5	10.0	0	11.5	--	20	8	78
FEB 01...	1055	178	8.5	2.0	2	12.4	2.0	<20	<2	62
MAR 14...	1000	192	7.1	9.5	2	11.6	--	20	46	77
APR 11...	0930	176	6.9	10.0	1	7.1	--	<20	<2	77
MAY 04...	1020	197	7.3	12.0	1	11.4	<.5	<20	13	79
JUN 06...	1150	217	7.2	8.0	3	10.5	--	40	130	92
JUL 11...	1130	192	7.1	11.0	1	10.9	<.5	<20	22	78
AUG 03...	1130	162	7.4	4.0	1	12.4	1.0	50	8	60
SEP 07...	1000	169	--	5.0	1	6.9	1.0	<20	2	69

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV 08...	20	6.7	8.1	1.2	--	24	8.3	--	113	7
FEB 01...	15	6.0	6.3	1.6	--	19	7.2	--	93	5
MAR 14...	20	6.5	6.7	1.3	--	20	6.7	--	101	8
APR 11...	21	6.0	6.8	1.0	--	20	6.7	--	117	1
MAY 04...	21	6.5	6.7	1.0	--	19	6.8	--	114	3
JUN 06...	23	8.3	6.2	1.1	.0	16	37	5.8	179	7
JUL 11...	21	6.3	6.3	.9	--	20	8.3	--	125	1
AUG 03...	15	5.5	5.9	1.5	--	18	8.1	--	102	5
SEP 07...	18	5.9	6.9	1.9	--	19	8.4	--	93	0

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 08...	--	--	--	--	1.3	--	--	--	2.0
FEB 01...	--	--	--	--	1.4	--	.13	--	3.4
MAR 14...	--	--	--	--	1.1	--	.00	--	7.1
APR 11...	--	--	--	--	.60	--	.00	--	2.0
MAY 04...	--	--	--	--	1.3	--	.01	--	5.1
JUN 06...	--	--	--	--	1.1	--	.01	--	7.1
JUL 11...	.13	.00	.01	.14	.15	.28	.00	.00	7.7
AUG 03...	.12	.00	.04	.26	.30	.42	.02	.02	5.2
SEP 07...	.14	.00	.02	.24	.26	.40	.01	.00	11

01397100 PRESCOTT BROOK AT ROUND VALLEY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUM-INUM (AL) (UG/L)	SUS-PENDED ALUM-INUM (AL) (UG/L)	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)
JUN									
06...	1150	120	90	30	1	30	0	0	0

DATE	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JUN									
06...	3	300	20	4	100	.0	5	0	30

01397380 BUSHKILL BROOK AT ROCKEFELLOWS MILLS, NJ

LOCATION.--Lat 40°31'15", long 74°49'40", Hunterdon County, Hydrologic Unit 02030501, at bridge on unnamed road in Rockefellows Mills, 200 ft (61 m) upstream from mouth, and 1.5 mi (2.4 km) west of Three Bridges.

DRAINAGE AREA.--4.31 mi² (11.16 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: November 1976 to September 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
NOV 15...	1030	423	8.3	3.0	3	11.5	--	<20	23
FEB 01...	1425	908	7.0	5.0	2	10.8	4.0	<20	<2
MAR 28...	1215	--	7.5	12.0	3	9.0	--	<20	<2
APR 11...	1245	556	7.5	12.0	5	10.2	--	<20	2
MAY 04...	1245	307	7.8	15.0	4	13.1	2.0	260	21
JUN 06...	1350	780	7.6	18.5	4	6.0	--	230	350
JUL 11...	1430	254	8.0	21.0	1	8.5	1.0	490	240
AUG 03...	1335	621	7.4	18.0	2	5.1	--	>24000	>2400
SEP 07...	1330	322	--	18.0	2	8.8	2.0	220	240

DATE	HARDNESS (CA+MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV 15...	170	48	11	16	2.1	79	20	275	0
FEB 01...	410	140	15	25	2.1	290	24	606	36
MAR 28...	220	70	11	21	2.4	160	29	384	3
APR 11...	250	81	11	2.2	2.2	170	28	441	27
MAY 04...	130	36	9.3	12	2.0	49	17	180	4
JUN 06...	340	110	16	32	4.0	200	34	561	18
JUL 11...	99	26	8.2	10	2.0	30	14	147	10
AUG 03...	220	65	14	33	4.6	100	55	430	36
SEP 07...	110	32	7.6	10	2.1	42	13	155	3

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 15...	--	--	--	--	2.2	--	--	--	2.9
FEB 01...	--	--	--	--	2.2	--	1.2	--	--
MAR 28...	--	--	--	--	1.8	--	.33	--	--
APR 11...	--	--	--	--	1.4	--	.16	--	2.0
MAY 04...	--	--	--	--	1.4	--	.15	--	7.1
JUN 06...	--	--	--	--	1.4	--	.98	--	7.1
JUL 11...	.75	.02	.11	.43	.54	1.3	.16	--	6.4
AUG 03...	1.9	.28	.93	1.7	2.6	4.8	.94	.76	4.0
SEP 07...	.40	.03	.38	.26	.64	1.1	.28	.23	8.5

01397400 SOUTH BRANCH RARITAN RIVER AT THREE BRIDGES, NJ

LOCATION.--Lat 40°31'01", long 74°48'12", Hunterdon County, Hydrologic Unit 02030105, at bridge on Main Street at Three Bridges, 2.2 mi (3.6 km) southeast of Darts Mills, and 0.4 mi (0.7 km) northeast of Voorhees Corner.

DRAINAGE AREA.--181 mi² (469 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

REMARKS.--On July 13, stream bed was disturbed while sample was taken.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
OCT 25...	1400	251	8.0	10.0	3	11.2	--	2800	240	86	21
NOV 15...	0930	299	8.3	3.0	2	13.2	--	230	9	99	24
FEB 08...	1330	241	7.2	1.5	2	12.7	4.0	<20	2	94	24
MAR 28...	1340	203	7.5	8.0	3	12.0	--	<20	33	74	19
APR 11...	1330	194	7.8	15.0	3	12.5	--	<20	<2	68	17
MAY 04...	1400	227	8.3	15.0	2	11.2	<.5	110	13	80	20
JUN 07...	0955	290	7.8	16.5	6	9.8	1.0	700	70	94	23
JUL 13...	1000	226	7.6	20.5	45	8.0	2.0	>24000	>2400	64	17
AUG 04...	0930	214	7.6	21.5	1	11.7	--	1100	240	87	22
SEP 07...	1445	196	--	18.5	2	11.5	2.0	1300	350	75	19

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
OCT 25...	8.1	15	2.5	.0	29	19	12	173	2	--
NOV 15...	9.5	17	2.1	--	30	19	--	163	9	--
FEB 08...	8.2	11	1.9	--	30	15	--	135	1	--
MAR 28...	6.5	11	1.8	--	24	15	--	119	0	--
APR 11...	6.3	9.2	1.5	--	23	13	--	130	2	--
MAY 04...	7.4	10	1.8	--	22	14	--	128	9	--
JUN 07...	8.8	17	2.2	.0	29	20	9.8	171	12	--
JUL 13...	5.3	17	3.3	--	26	15	--	129	260	1.5
AUG 04...	7.8	8.8	1.8	--	19	13	--	148	13	.73
SEP 07...	6.7	7.9	1.8	--	19	11	--	107	1	.37

01397400 SOUTH BRANCH RARITAN RIVER AT THREE BRIDGES, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 25...	--	--	--	1.1	150	--	--	--	--	2.0
NOV 15...	--	--	--	1.4	--	--	--	--	2.2	--
FEB 08...	--	--	--	1.4	--	--	.12	--	5.2	--
MAR 28...	--	--	--	1.4	--	--	.05	--	--	--
APR 11...	--	--	--	1.3	--	--	.01	--	1.4	--
MAY 04...	--	--	--	1.4	--	--	.16	--	7.6	--
JUN 07...	--	--	--	1.3	--	--	.68	--	4.9	--
JUL 13...	.05	.44	1.5	1.9	--	3.5	.82	.48	7.4	--
AUG 04...	.05	.08	.52	.60	--	1.4	.08	.04	4.9	--
SEP 07...	.02	.01	.31	.32	--	.71	.06	.04	9.7	--

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
OCT 25...	1400	130	110	20	1	6	100	0	<10	<10	0
JUN 07...	0955	--	--	40	3	--	20	0	--	--	0

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)
OCT 25...	0	<10	4	<10	260	100	7700	22	<10	50	630
JUN 07...	0	--	14	--	--	60	--	2	--	70	--

DATE	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT 25...	.1	.0	4	<10	0	20	25	--	0	.0
JUN 07...	.0	--	4	--	0	40	--	0	--	--

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT 25...	0	.0	.0	.0	.0	.0	.0	.0	.0	0
JUN 07...	--	--	--	--	--	--	--	--	--	--

01398000 NESHANIC RIVER AT REAVILLE, NJ

LOCATION.--Lat 40°28'18", long 74°49'42", Hunterdon County, Hydrologic Unit 02030105, on left bank 50 ft (15 m) downstream from highway bridge, 0.6 mi (1.0 km) southwest of Reaville, 1.5 mi (2.4 km) downstream from Third Neshanic River, and 2.2 mi (3.5 km) upstream from Back Brook.

DRAINAGE AREA.--25.7 mi² (66.6 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: June 1930 to current year.

REVISED DISCHARGE RECORDS.--WSP 1552: 1933, 1934(M), 1936(M), 1938, 1940(M), 1942(M), 1945-46, 1951, 1952(M).

GAGE.--Water-stage recorder. Concrete control since Sept. 26, 1935. Datum of gage is 109.46 ft (33.363 m) NGVD.

REMARKS.--Discharge records good except those from Dec. 15 to Jan. 31, which are fair. Regulation from unknown sources during summer season.

AVERAGE DISCHARGE.--47 years, 35.2 ft³/s (0.997 m³/s), 18.59 in/yr (472 mm/yr).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,600 ft³/s (45.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 24	0030	2320	65.7	8.08	2.463
Mar. 22	1700	*3130	88.6	8.91	2.716
Apr. 5	0445	2220	62.9	7.97	2.429

Minimum discharge, 0.02 ft³/s (0.001 m³/s) July 5, gage height, 2.02 ft (0.616 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,900 ft³/s (450 m³/s) Aug. 28, 1971 (gage height, 13.84 ft or 4.218 m, from high-water mark in gage house) from rating curve extended above 1,700 ft³/s (48 m³/s) on basis of slope-area measurement 0.7 mi (1.1 km) downstream (adjusted to present site) at gage height, 11.90 ft (3.627 m); no flow many days 1965, 1966, and part of July 17, 1968.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	24	1.7	4.2	2.5	50	22	26	4.2	.89	22	1.5
2	2.0	14	1.7	3.3	2.5	38	71	23	3.5	.81	14	1.5
3	7.3	11	1.3	2.5	3.1	31	102	22	2.2	.62	6.7	1.2
4	2.0	8.7	1.1	2.7	4.2	192	53	18	1.9	.46	5.8	1.1
5	1.0	7.7	1.4	2.4	4.8	201	848	66	2.5	.06	3.1	.96
6	.86	6.7	1.3	1.9	4.8	80	172	47	5.4	.09	3.7	1.1
7	.86	5.8	30	2.2	3.3	59	90	31	4.1	1.5	3.8	1.1
8	.86	5.3	20	2.4	2.9	45	68	24	2.9	3.6	2.3	.93
9	16	4.5	13	3.1	3.3	37	53	24	16	1.3	1.7	.84
10	6.4	4.5	9.0	8.7	4.5	32	44	21	7.9	.93	3.1	.98
11	2.4	4.0	8.3	22	19	28	38	17	4.3	.75	6.4	.89
12	1.6	3.5	8.0	24	107	25	37	14	3.2	353	2.2	.77
13	1.4	3.3	5.6	11	219	256	27	13	2.6	53	37	.57
14	1.1	3.3	5.6	8.3	138	301	24	11	2.3	15	16	.73
15	.95	3.1	8.0	7.5	76	94	21	9.2	2.4	8.1	11	.75
16	.86	2.9	7.6	6.6	43	67	18	8.3	2.0	5.6	6.4	1.1
17	.86	2.7	5.6	6.2	28	49	17	7.6	1.6	4.1	5.9	3.2
18	.86	3.1	5.0	5.8	19	81	16	7.1	1.8	3.2	5.2	1.7
19	.77	2.7	4.5	5.6	17	67	15	8.0	1.6	2.4	3.5	1.1
20	7.3	2.5	7.0	5.0	17	51	13	6.8	1.8	4.2	2.9	3.0
21	25	2.4	17	4.6	15	47	12	6.0	2.7	2.7	2.3	1.7
22	6.7	2.2	11	4.2	12	1020	12	5.0	1.5	1.8	7.5	1.1
23	4.0	2.0	8.0	3.8	34	292	11	4.5	1.1	1.1	3.3	1.1
24	3.5	2.0	6.0	3.5	377	108	17	4.1	1.0	1.1	4.1	16
25	4.8	1.9	3.0	3.3	502	72	47	3.9	1.5	4.0	7.1	38
26	31	1.9	6.0	3.1	87	57	50	3.6	3.4	4.1	2.9	20
27	13	2.2	12	2.9	70	47	107	2.8	1.3	1.5	2.3	17
28	8.0	2.2	9.0	2.7	84	42	44	2.5	1.0	.99	2.1	14
29	6.4	4.2	5.6	2.5	---	38	52	2.1	2.8	.93	1.8	9.1
30	5.3	2.9	5.0	2.4	---	32	32	2.2	1.1	1.1	1.5	6.7
31	42	---	4.5	2.2	---	27	---	2.1	---	1.1	1.4	---
TOTAL	209.28	147.2	232.8	170.6	1899.9	3566	2133	442.8	91.6	480.03	199.0	149.72
MEAN	6.75	4.91	7.51	5.50	67.9	115	71.1	14.3	3.05	15.5	6.42	4.99
MAX	42	24	30	24	502	1020	848	66	16	353	37	38
MIN	.77	1.9	1.1	1.9	2.5	25	11	2.1	1.0	.06	1.4	.57
CFSM	.26	.19	.29	.21	2.64	4.48	2.77	.56	.12	.60	.25	.19
IN.	.30	.21	.34	.25	2.75	5.16	3.09	.64	.13	.69	.29	.22

CAL YR 1976 TOTAL 8218.24 MEAN 22.5 MAX 701 MIN .16 CFSM .88 IN 11.90
WTR YR 1977 TOTAL 9721.93 MEAN 26.6 MAX 1020 MIN .06 CFSM 1.04 IN 14.07

01398102 SOUTH BRANCH RARITAN RIVER AT SOUTH BRANCH, NJ

LOCATION.--Lat 40°32'48", long 74°41'48", Somerset County, Hydrologic Unit 02030105, at bridge on Studdiford Drive at South Branch, 0.8 mi (1.3 km) upstream from mouth, and 2.7 mi (4.3 km) southeast of Readington.

DRAINAGE AREA.--265 mi² (686 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI (MPN)
NOV									
08...	1000	252	7.8	5.0	3	12.0	--	130	23
FEB									
08...	0930	277	7.1	1.5	3	12.4	2.0	80	5
APR									
12...	1000	203	6.9	19.0	2	11.2	<.5	20	8
MAY									
05...	1145	240	7.5	15.0	20	10.0	3.0	3500	>2400
JUN									
07...	1305	252	7.7	18.5	3	9.4	1.0	230	79
JUL									
21...	1120	223	8.6	26.0	1	7.8	<.5	330	49
AUG									
04...	1230	231	7.5	22.0	1	12.0	1.0	790	240

DATE	HARD-NESS (CA,MG) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)
NOV									
08...	93	22	9.2	13	2.0	26	17	126	11
FEB									
08...	94	24	8.3	15	1.9	33	21	156	10
APR									
12...	83	21	7.5	9.2	1.6	23	14	143	6
MAY									
05...	80	20	7.2	12	2.1	25	20	136	39
JUN									
07...	95	[illegible]	9.2	12	1.9	27	17	157	3
JUL									
21...	78	[illegible]	7.4	10	2.0	23	14	128	9
AUG									
04...	91	[illegible]	8.2	14	2.0	23	16	149	22

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV									
08...	--	--	--	--	1.1	--	--	--	2.5
FEB									
08...	--	--	--	--	1.4	--	.18	--	5.7
APR									
12...	--	--	--	--	1.1	--	.04	--	1.8
MAY									
05...	--	--	--	--	1.3	--	.12	--	7.6
JUN									
07...	--	--	--	--	1.1	--	.10	--	4.7
JUL									
21...	.46	.01	.05	.16	.21	.68	.08	.08	3.8
AUG									
04...	.81	.04	.13	.45	.58	1.4	.16	.13	6.0

01398110 HOLLAND BROOK AT SOUTH BRANCH, NJ

LOCATION.--Lat 40°33'11", long 74°42'03", Somerset County, Hydrologic Unit 02030105, at bridge on South Branch Road, 2.2 mi (3.6 km) southeast of Readington, and 3.2 mi (5.1 km) northwest of Frankfort.

DRAINAGE AREA.--12.2 mi² (31.6 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 13...	1400	309	7.0	15.0	6	11.4	--	230	49	140
NOV 08...	1130	270	7.7	5.0	2	12.7	--	20	33	100
FEB 23...	1345	300	7.4	8.0	6	11.6	3.0	<20	>2400	100
APR 12...	1100	197	7.7	19.0	5	11.2	1.0	20	79	85
MAY 05...	1355	179	7.2	15.0	25	10.7	2.0	3500	>2400	68
JUN 07...	1145	292	7.8	18.5	5	10.0	<.5	9200	26	120
JUL 11...	0930	193	7.5	23.0	1	10.9	<.5	20	27	79
AUG 04...	1100	316	7.3	22.5	20	8.6	1.0	1400	350	130

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT 13...	33	13	10	1.7	.0	65	10	14	210	38
NOV 08...	25	10	10	1.8	--	48	9.8	--	167	13
FEB 23...	25	10	12	2.0	--	43	19	--	144	15
APR 12...	22	7.4	8.7	1.6	--	34	9.7	--	140	15
MAY 05...	18	5.7	8.1	1.7	--	28	8.8	--	118	47
JUN 07...	30	11	11	1.8	--	51	9.1	--	180	15
JUL 11...	21	6.4	6.9	.7	--	21	9.2	--	122	5
AUG 04...	32	11	12	1.6	--	27	20	--	130	43

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 13...	--	--	--	--	2.7	--	--	--	1.6
NOV 08...	--	--	--	--	1.4	--	--	--	2.1
FEB 23...	--	--	--	--	1.1	--	.09	--	3.4
APR 12...	--	--	--	--	1.0	--	.04	--	1.4
MAY 05...	--	--	--	--	1.4	--	.12	--	6.3
JUN 07...	--	--	--	--	1.4	--	.10	--	6.4
JUL 11...	.09	.00	.02	.20	.22	.31	.02	.01	6.3
AUG 04...	.54	.01	.06	.55	.61	1.2	.07	.02	5.8

01398110 HOLLAND BROOK AT SOUTH BRANCH, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUM-INUM (AL) (UG/L)	SUS-PENDED ALUM-INUM (AL) (UG/L)	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)
OCT									
13...	1400	80	70	10	2	100	0	0	0

DATE	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT									
13...	0	240	40	2	120	<.5	1	0	0

01398260 NORTH BRANCH RARITAN RIVER NEAR CHESTER, NJ

LOCATION.--Lat 40°46'16", long 74°37'34", Morris County, Hydrologic Unit 02030105, at bridge on State Route 24, 0.8 mi (1.3 km) upstream from Burnett Brook, and 3.8 mi (6.1 km) east of Chester.

DRAINAGE AREA.--7.57 mi² (19.61 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1964-65, 1967, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
OCT											
14...	1000	212	8.2	11.0	14	10.2	<2.0	70	540	63	15
14...	1500	--	--	--	--	--	--	--	--	--	--
NOV											
18...	1000	203	7.2	5.0	2	11.7	1.0	20	540	62	15
FEB											
03...	1115	--	7.1	.5	1	13.0	--	<20	<2	67	16
MAR											
17...	1045	173	7.3	7.0	20	11.7	.1	<20	22	43	10
APR											
14...	1005	175	7.3	15.0	2	13.0	1.0	<20	240	53	13
MAY											
10...	1000	187	7.3	10.0	1	11.3	2.0	20	2	52	13
JUN											
08...	0955	232	7.4	13.5	2	9.6	3.0	90	130	69	17
JUL											
18...	1000	271	7.4	19.5	1	6.6	--	170	170	83	21
AUG											
10...	1000	242	7.3	16.5	1	8.5	2.0	1400	1100	69	17

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
OCT										
14...	6.2	12	2.0	.0	20	20	19	128	28	--
14...	--	--	--	--	--	--	--	--	--	--
NOV										
18...	6.0	10	1.6	--	16	17	--	110	2	--
FEB										
03...	6.5	19	1.7	--	16	28	--	161	0	--
MAR										
17...	4.3	12	1.5	--	14	20	--	107	1	--
APR										
14...	5.0	11	1.5	--	14	19	--	95	2	--
MAY										
10...	4.8	13	1.3	--	15	21	--	110	7	--
JUN										
08...	6.5	17	2.0	--	15	24	--	147	7	--
JUL										
18...	7.4	18	2.5	--	15	25	--	169	0	3.4
AUG										
10...	6.4	17	2.8	--	16	26	--	184	11	2.0

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT										
14...	--	--	--	1.4	--	--	--	--	4.7	--
14...	--	--	--	--	140	--	--	--	--	1.3
NOV										
18...	--	--	--	1.4	--	--	--	--	--	--
FEB										
03...	--	--	--	5.9	--	--	.65	--	7.3	--
MAR										
17...	--	--	--	1.4	--	--	.13	--	7.8	--
APR										
14...	--	--	--	1.0	--	--	.14	--	4.8	--
MAY										
10...	--	--	--	1.1	--	--	.19	--	4.0	--
JUN										
08...	--	--	--	1.1	--	--	.36	--	3.8	--
JUL										
18...	.05	.54	.66	1.2	--	4.6	.94	.94	7.4	--
AUG										
10...	.41	.30	.90	1.2	--	3.6	.76	.74	6.1	--

01398260 NORTH BRANCH RARITAN RIVER NEAR CHESTER, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
OCT											
14...	1000	440	410	30	0	--	70	0	--	--	0
14...	1500	--	--	--	--	2	--	--	0	12	--

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)
OCT										
14...	0	--	0	--	740	130	--	2	--	30
14...	--	1	--	4	--	--	5100	--	12	--

DATE	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT										
14...	--	<.5	--	2	--	0	20	--	--	--
14...	180	--	.0	--	0	--	--	19	0	.0

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT										
14...	--	--	--	--	--	--	--	--	--	--
14...	3	1.0	.8	3.2	.0	.0	.0	.0	.0	0

01398500 NORTH BRANCH RARITAN RIVER NEAR FAR HILLS, NJ

LOCATION.--Lat 40°42'30", long 74°38'11", Somerset County, Hydrologic Unit 02030105, on left bank 75 ft (23 m) upstream from Ravine Lake Dam, 1.6 mi (2.6 km) north of Far Hills, and 2.3 mi (3.7 km) upstream from Peapack Brook. Water-quality samples collected at bridge on unnamed road 0.2 mi (0.3 km) downstream from gage.

DRAINAGE AREA.--26.2 mi² (67.9 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1921 to September 1975.
CHEMICAL ANALYSES: Water years 1963 to current year.
SEDIMENT ANALYSES: Water years 1967-73.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
NOV 17...	1230	178	8.0	4.0	3	11.8	1.0	<20	5
FEB 22...	1245	241	7.4	.5	2	14.2	3.0	<20	8
MAR 17...	1200	151	7.3	9.0	5	11.4	1.0	50	79
APR 14...	1130	159	7.6	14.5	5	7.2	1.0	20	7
MAY 10...	1130	142	7.6	12.0	2	11.5	2.0	<20	33
JUN 08...	1150	179	7.6	17.0	4	8.2	1.0	<20	240
JUL 18...	1130	189	9.7	26.0	2	11.7	--	50	17
AUG 10...	1115	167	8.9	20.5	3	8.5	5.0	80	110

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV 17...	62	15	5.9	8.0	1.6	19	14	108	13
FEB 22...	65	16	6.1	14	1.9	19	33	140	0
MAR 17...	44	11	4.1	8.6	1.4	16	14	97	3
APR 14...	61	15	5.7	8.6	1.4	17	13	84	5
MAY 10...	62	17	4.7	8.3	1.1	17	13	88	15
JUN 08...	61	15	5.6	9.4	1.4	16	13	107	0
JUL 18...	46	9.4	5.5	8.6	2.8	17	17	94	5
AUG 10...	56	14	5.2	9.0	1.8	14	14	102	11

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 17...	--	--	--	--	1.1	--	--	--	--
FEB 22...	--	--	--	--	1.4	--	.11	--	1.4
MAR 17...	--	--	--	--	1.1	--	.05	--	6.2
APR 14...	--	--	--	--	1.0	--	.03	--	6.3
MAY 10...	--	--	--	--	1.3	--	.07	--	4.0
JUN 08...	--	--	--	--	1.0	--	.08	--	4.9
JUL 18...	.35	.01	.09	.46	.55	.91	.04	.04	6.1
AUG 10...	.19	.01	.07	1.3	1.4	1.6	.11	.03	4.9

01398900 NORTH BRANCH RARITAN RIVER AT BEDMINSTER, NJ

LOCATION.--Lat 40°40'58", long 74°38'18", Somerset County, Hydrologic Unit 02030105, at bridge on U.S. Route 202 in Bedminster, 3.0 mi (4.8 km) southeast of Gladstone, and 4.1 mi (6.6 km) northeast of Burnt Mills.

DRAINAGE AREA.--40.8 mi² (105.7 km²).

PERIOD OF ROCORD.--
CHEMICAL ANALYSES: November 1976 to August 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
NOV 17...	1000	198	8.1	3.0	2	13.4	5.0	20	13
FEB 22...	0930	289	7.4	.0	3	15.2	3.0	<20	5
MAR 17...	1400	169	7.8	10.0	6	11.8	2.0	50	17
APR 14...	1300	172	9.0	16.0	2	8.2	1.0	<20	49
MAY 10...	1300	164	8.5	13.0	1	11.8	2.0	20	130
JUN 08...	1410	202	7.9	17.5	3	9.9	1.0	20	46
JUL 18...	1230	222	8.7	23.5	1	10.2	--	790	240
AUG 10...	1330	190	8.6	20.0	1	10.2	--	130	1600

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV 17...	75	18	7.3	8.4	1.5	18	14	124	8
FEB 22...	83	20	8.1	19	2.0	20	34	166	0
MAR 17...	48	11	4.9	9.0	1.4	17	14	104	4
APR 14...	67	17	5.9	8.7	1.4	17	13	98	2
MAY 10...	62	16	5.4	8.1	1.1	17	13	96	13
JUN 08...	70	17	6.7	9.8	1.5	16	14	116	0
JUL 18...	78	19	7.5	11	1.7	14	15	125	2
AUG 10...	69	17	6.5	9.4	1.9	15	15	125	6

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 17...	--	--	--	--	.98	--	--	--	--
FEB 22...	--	--	--	--	1.3	--	.10	--	2.2
MAR 17...	--	--	--	--	1.1	--	.04	--	8.4
APR 14...	--	--	--	--	1.3	--	.00	--	6.2
MAY 10...	--	--	--	--	1.3	--	.02	--	4.3
JUN 08...	--	--	--	--	1.4	--	.10	--	3.5
JUL 18...	.50	.01	.04	.38	.42	.93	.10	.05	7.1
AUG 10...	.28	.01	.03	.70	.73	1.0	.10	.04	4.2

01398950 MINE BROOK AT FAR HILLS, NJ

LOCATION.--Lat 40°40'57", long 74°38'08", Somerset County, Hydrologic Unit 02030105, at bridge on unnamed road in Far Hills, 400 ft (122 m) upstream from mouth, and 2.7 mi (4.3 km) southeast Peapack.

DRAINAGE AREA.--7.78 mi² (20.15 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1964, 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 17...	1100	254	8.2	4.0	3	13.7	1.0	20	79	80
FEB 22...	1100	364	7.3	.0	4	14.2	3.0	<20	79	90
MAR 17...	1315	209	7.4	9.5	8	11.8	3.0	50	17	55
APR 14...	1410	193	8.5	17.0	2	11.3	1.0	20	49	58
MAY 10...	1405	187	8.6	13.0	2	13.5	7.0	80	110	91
JUN 08...	1320	229	7.7	17.0	3	9.8	2.0	20	240	68
JUL 18...	1340	261	9.3	25.0	1	10.6	--	330	94	74
AUG 10...	1230	227	8.3	20.5	0	11.2	1.0	330	140	70

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV 17...	21	6.8	16	2.5	29	20	--	152	17
FEB 22...	24	7.2	29	2.6	29	50	--	205	3
MAR 17...	14	4.9	12	1.5	24	19	--	131	12
APR 14...	15	5.1	11	1.6	23	16	--	113	2
MAY 10...	28	5.2	11	1.3	23	16	17	120	11
JUN 08...	18	5.5	15	2.0	24	19	--	119	0
JUL 18...	20	5.8	19	2.4	24	23	--	148	7
AUG 10...	19	5.4	16	2.6	23	18	--	146	12

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 17...	--	--	--	--	1.3	--	--	--	--
FEB 22...	--	--	--	--	3.1	--	.46	--	2.4
MAR 17...	--	--	--	--	1.1	--	.12	--	5.6
APR 14...	--	--	--	--	1.0	--	.11	--	5.0
MAY 10...	--	--	--	--	1.1	--	.20	--	3.2
JUN 08...	--	--	--	--	1.1	--	.25	--	4.0
JUL 18...	1.4	.01	.06	.49	.55	2.0	.47	.44	6.8
AUG 10...	1.1	.02	.01	.63	.64	1.7	.40	.35	4.7

01398950 MINE BROOK AT FAR HILLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY								
10...	1405	50	1	9	0	0	0	0

DATE	DISSOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY								
10...	120	3	30	.0	2	0	20	0

01399120 NORTH BRANCH RARITAN RIVER AT BURNT MILLS, NJ

LOCATION.--Lat 40°38'09", long 74°40'56", Somerset County, Hydrologic Unit 02030105, on right bank at bridge on Burnt Mills Road, 0.1 mi (0.2 km) upstream from Lamington River, 0.3 mi (0.5 km) east of Burnt Mills, and 4.0 mi (6.4 km) southwest of Far Hills.

DRAINAGE AREA.--63.8 mi² (165.2 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1964, 1975 to current year.
CHEMICAL ANALYSES: Water years 1964, October 1976 to August 1977.
SEDIMENT ANALYSES: March to July 1977.

REMARKS.--Site is sampled as part of a project to study the effect of supplemental releases from Round Valley Reservoir to the South Branch Rockaway Creek.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Selected analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	COD IN BOTTOM MATERIAL (MG/KG)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL COLIFORM .7UM-MF (COL./100 ML)
OCT											
12...	1400	216	8.3	12.0	7	12.0	--	--	1.0	230	--
NOV											
17...	1530	217	8.1	3.0	2	14.6	--	--	<.5	80	--
FEB											
23...	1130	290	7.1	.5	1	8.0	--	--	2.0	50	--
MAR											
13...	1538	127	7.5	11.0	190	10.1	64	--	4.0	--	4600
APR											
12...	1400	167	8.8	12.0	2	13.6	--	--	--	20	--
19...	1130	189	9.4	13.5	1	15.5	9	17000	1.5	--	60
MAY											
11...	1130	183	8.4	12.0	2	13.8	--	--	2.0	20	--
JUN											
13...	1345	188	7.9	25.0	4	10.2	--	--	--	140	--
26...	0150	150	--	20.0	5	--	27	--	--	--	--
JUL											
05...	1455	229	8.5	25.6	1	9.6	10	10000	2.4	--	420
21...	.000	221	7.9	23.0	1	9.4	--	--	--	3500	--
AUG											
09...	1300	173	7.8	21.0	4	9.5	--	--	--	20	--

DATE	FECAL STREPTOCOCCI (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
OCT											
12...	130	--	71	--	18	6.4	11	1.9	--	--	--
NOV											
17...	49	--	74	--	18	7.1	9.6	1.6	--	--	--
FEB											
23...	240	--	83	--	21	7.4	20	2.1	--	--	--
MAR											
13...	--	833000	44	24	10	4.5	8.1	2.1	24	0	20
APR											
12...	5	--	59	--	15	5.2	8.9	1.3	--	--	--
19...	--	--	68	26	17	6.1	8.8	1.3	41	5	42
MAY											
11...	2	--	67	--	17	6.0	8.9	1.4	--	--	--
JUN											
13...	49	--	64	--	16	5.9	11	1.7	--	--	--
26...	--	--	47	--	12	4.1	8.5	2.1	--	--	--
JUL											
05...	--	1500	82	0	21	7.0	11	1.8	66	18	84
21...	230	--	78	--	19	7.3	13	2.5	--	--	--
AUG											
09...	>2400	--	56	--	14	5.1	9.8	2.1	--	--	--

01399120 NORTH BRANCH RARITAN RIVER AT BURNT MILLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	DISSOLVED NITRATE (N) (MG/L)
OCT											
12...	--	.2	19	16	--	--	15	120	7	--	--
NOV											
17...	--	--	21	15	--	--	--	122	0	--	--
FEB											
23...	--	--	21	36	--	--	--	152	18	--	--
MAR											
13...	1.2	--	16	14	--	--	--	77	--	--	--
APR											
12...	--	--	19	14	--	--	--	117	5	--	--
19...	.0	.0	19	14	.1	.1	11	97	--	--	--
MAY											
11...	--	--	20	14	--	--	11	133	13	--	--
JUN											
13...	--	--	18	15	--	--	--	124	0	--	--
26...	--	--	14	12	--	--	--	108	--	--	--
JUL											
05...	.5	.0	17	16	.1	.1	12	131	5	--	.62
21...	--	--	19	16	--	--	--	127	6	.56	--
AUG											
09...	--	--	15	14	--	--	--	109	27	.50	--

DATE	TOTAL NITRITE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE IN BOT. MAT. (MG/KG)	TOTAL AMMONIA NITROGEN (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)	TOTAL AMMONIA NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL ORGANIC NITROGEN (N) (MG/L)	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)
OCT											
12...	--	--	--	--	--	--	--	--	1.1	--	300
NOV											
17...	--	--	--	--	--	--	--	--	1.4	--	--
FEB											
23...	--	--	--	--	--	--	--	--	1.4	--	--
MAR											
13...	--	--	--	--	.06	--	--	.64	--	.70	--
APR											
12...	--	--	--	--	--	--	--	--	1.0	--	--
19...	--	--	2.7	--	.00	21	--	.11	--	.11	2200
MAY											
11...	--	--	--	--	--	--	--	--	1.7	--	--
JUN											
13...	--	--	--	--	--	--	--	--	1.3	--	--
26...	--	--	--	--	.01	--	--	.66	--	.67	--
JUL											
05...	--	.01	5.5	--	.01	6.3	--	.37	--	.38	1500
21...	.01	--	--	.05	--	--	.24	--	.29	--	--
AUG											
09...	.01	--	--	.02	--	--	1.5	--	1.5	--	--

DATE	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN IN BOTTOM MATERIAL (N) (MG/KG)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED-PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS IN BOTTOM MATERIAL (MG/KG)	TOTAL ORGANIC CARBON (C) (MG/L)	DISSOLVED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)	INORGANIC CARBON IN BOTTOM MATERIAL (G/KG)
OCT											
12...	--	--	--	--	--	--	--	4.3	--	2.8	--
NOV											
17...	--	--	--	--	--	--	--	2.2	--	--	--
FEB											
23...	--	--	.16	--	--	--	--	1.8	--	--	--
MAR											
13...	--	--	--	.04	--	--	--	--	4.5	--	--
APR											
12...	--	--	.04	--	--	--	--	1.0	--	--	--
19...	--	2200	--	.03	--	--	220	--	1.0	6.1	.0
MAY											
11...	--	--	.01	--	--	--	--	4.7	--	--	--
JUN											
13...	--	--	.07	--	--	--	--	5.2	--	--	--
26...	--	--	--	.07	--	--	--	--	5.3	--	--
JUL											
05...	--	1600	--	.10	--	.06	720	4.3	2.1	3.6	.0
21...	.86	--	.11	--	.08	--	--	6.0	--	--	--
AUG											
09...	2.0	--	.14	--	.08	--	--	6.1	--	--	--

01399120 NORTH BRANCH RARITAN RIVER AT BURNT MILLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BARIUM (BA) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
OCT 12...	1400	100	90	10	0	5	--	80	3	0	20	0
APR 19...	1130	--	--	140	--	4	0	10	--	<10	10	--
MAY 11...	1130	--	--	20	1	--	--	0	0	--	--	0
JUL 05...	1455	--	--	70	--	4	100	70	--	<10	<10	--

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	DISSOLVED LITHIUM (LI) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)
OCT 12...	0	10	0	10	370	140	9800	1	21	--	30	--
APR 19...	--	<10	--	<10	--	100	3300	--	<10	0	--	30
MAY 11...	0	--	0	--	--	110	--	5	--	--	30	--
JUL 05...	--	10	--	<10	--	190	920	--	<10	0	--	10

DATE	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	DISSOLVED STRONTIUM (SR) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)
OCT 12...	280	<.5	.0	2	10	0	--	0	32	--	0
APR 19...	290	--	.0	--	<10	--	190	--	20	--	0
MAY 11...	--	.0	--	0	--	0	--	50	--	0	--
JUL 05...	290	--	.3	--	<10	--	210	--	20	--	0

DATE	ALDRIN IN BOTTOM MATERIAL (UG/KG)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT 12...	.0	1	.0	.3	.0	.0	.0	.0	.0	.0	0
APR 19...	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
MAY 11...	--	--	--	--	--	--	--	--	--	--	--
JUL 05...	.0	3	.0	.0	.0	.0	.0	.0	.0	.0	0

01399120 NORTH BRANCH RARITAN RIVER AT BURNT MILLS, NJ--Continued

SEDIMENT DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM
OCT							
20...	1140	38	9.0	10	1.0	--	--
20...	1530	41	10.0	6	.66	--	--
20...	1635	42	10.0	11	1.2	--	--
20...	1740	46	10.0	35	4.3	--	--
DEC							
03...	1330	--	.5	8	--	--	--
07...	0130	42	1.0	11	1.2	--	--
07...	0245	42	1.0	7	.79	--	--
07...	0545	45	1.0	3	.36	--	--
07...	0815	49	--	10	1.3	--	--
07...	1200	138	.0	0	.00	--	--
07...	1625	940	3.0	442	1120	--	--
FEB							
25...	1450	25	4.0	144	9.7	--	--
27...	1520	190	7.0	25	13	--	--
MAR							
04...	1500	116	4.0	223	70	35	52
13...	0750	159	9.0	4	1.7	--	--
13...	0915	171	9.0	7	3.2	--	--
13...	1100	288	9.5	48	37	--	--
13...	1210	574	10.0	378	586	--	--
13...	1415	2300	--	1870	11600	--	--
13...	1550	2600	--	1640	11500	--	--
13...	1700	2500	--	430	2900	--	--
13...	1830	2000	--	254	1370	--	--
18...	1215	220	5.0	7	4.2	--	--
18...	1355	256	5.0	11	7.6	--	--
18...	1615	326	5.0	21	18	--	--
APR							
02...	1140	174	7.5	4	1.9	--	--
19...	1110	130	--	3	1.1	--	--
JUN							
06...	1400	32	--	7	.60	--	--
08...	1445	33	18.5	8	.71	--	--
09...	1240	80	15.0	32	6.9	--	--
09...	1440	135	--	62	23	--	--
09...	1605	164	--	71	31	--	--
09...	1800	185	--	76	38	--	--
09...	2000	277	--	145	108	--	--
09...	2200	323	--	167	146	--	--
10...	1325	226	16.0	30	18	--	--
10...	1440	205	16.0	28	15	--	--
22...	1445	29	22.5	5	.39	--	--
25...	1640	27	20.5	5	.36	--	--

01399120 NORTH BRANCH RARITAN RIVER AT BURNT MILLS, NJ--Continued

SEDIMENT DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
OCT						
20...	--	--	--	--	--	--
20...	--	--	--	--	--	--
20...	--	--	--	--	--	--
20...	--	--	--	--	--	--
DEC						
03...	--	--	--	--	--	--
07...	--	--	--	--	--	--
07...	--	--	--	--	--	--
07...	--	--	--	--	--	--
07...	--	--	--	--	--	--
07...	--	--	--	--	--	--
07...	--	--	--	--	--	--
FEB						
25...	--	--	--	--	--	--
27...	--	--	--	--	--	--
MAR						
04...	67	79	91	96	98	100
13...	--	--	--	--	--	--
13...	--	--	--	--	--	--
13...	--	--	--	--	--	--
13...	--	--	--	--	--	--
13...	--	--	--	--	--	--
13...	--	--	--	--	--	--
13...	--	--	--	--	--	--
13...	--	--	--	--	--	--
18...	--	--	--	--	--	--
18...	--	--	--	--	--	--
18...	--	--	--	--	--	--
APR						
02...	--	--	--	--	--	--
19...	--	--	--	--	--	--
JUN						
06...	--	--	--	--	--	--
08...	--	--	--	--	--	--
09...	--	--	--	--	--	--
09...	--	--	--	--	--	--
09...	--	--	--	--	--	--
09...	--	--	--	--	--	--
09...	--	--	--	--	--	--
09...	--	--	--	--	--	--
10...	--	--	--	--	--	--
10...	--	--	--	--	--	--
22...	--	--	--	--	--	--
25...	--	--	--	--	--	--

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
JUN										
25...	1805	31	--	28	2.3	--	--	--	--	--
25...	1845	38	--	25	2.6	--	--	--	--	--
25...	1940	98	--	1200	3180	--	--	--	--	--
25...	2210	620	19.0	810	1360	52	68	86	95	100
26...	0030	450	--	268	326	--	--	--	--	--
26...	0150	312	20.0	182	153	--	--	--	--	--
26...	0245	284	--	107	82	--	--	--	--	--
26...	1310	100	--	33	8.9	--	--	--	--	--
JUL										
02...	1115	28	22.0	3	.23	--	--	--	--	--
14...	1800	26	28.0	6	.42	--	--	--	--	--
26...	0920	25	20.0	6	.40	--	--	--	--	--
SEP										
08...	1250	28	21.0	6	.45	--	--	--	--	--

RARITAN RIVER BASIN

01399190 LAMINGTON (BLACK) RIVER AT SUCCASUNNA, NJ

LOCATION.--Lat 40°51'03", long 74°38'02", Morris County, Hydrologic Unit 02030105, on right bank, 10 ft (3 m) upstream from bridge on Righter Road, 0.7 mi (1.13 km) south of Succasunna, and 0.4 mi (0.64 km) upstream from Succasunna Brook.

DRAINAGE AREA.--7.37 m^2 (19.1 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1976 to September 1977.

GAGE.--Water-stage recorder above prefabricated concrete bumper-block control. Altitude of the gage is 695 ft (212 m), from topographic map.

REMARKS.--Discharge records good except those for January and February and those for period of no gage-height record, which are fair.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 40 ft^3/s (1.13 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 25	0100	44	1.24	4.02	1.225
Mar. 22	1900	*55	1.56	4.37	1.332

Minimum discharge, 1.6 ft^3/s (0.05 m^3/s) Sept. 15, gage height, 2.34 ft (0.713 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	17	6.1	5.3	3.2	11	17	15	8.5	6.8	3.0	2.7
2	7.0	15	6.1	5.3	3.2	9.6	19	15	8.8	6.4	3.0	2.7
3	10	12	6.0	5.1	3.2	8.9	25	14	7.3	6.1	6.6	2.7
4	12	10	6.0	5.3	3.2	17	23	14	6.4	5.6	6.8	2.7
5	11	9.2	6.0	5.3	3.8	24	34	16	6.4	5.6	5.4	2.8
6	10	8.3	6.0	4.9	5.4	19	31	15	6.8	5.1	4.4	2.8
7	9.0	8.3	17	5.1	3.8	15	27	15	7.6	5.4	4.4	2.7
8	7.5	8.1	17	4.9	3.2	12	24	14	6.8	5.6	4.6	2.3
9	11	7.7	12	4.8	4.8	11	21	15	12	5.6	5.6	2.2
10	17	7.7	9.2	5.6	3.0	10	20	14	19	5.4	4.4	2.1
11	15	7.6	8.3	6.0	3.2	10	19	14	15	5.1	4.4	2.0
12	10	7.7	7.9	5.3	4.1	9.8	18	13	12	5.1	3.9	2.0
13	8.0	7.4	7.4	4.9	5.4	21	17	12	11	5.1	5.6	2.0
14	7.0	7.4	6.8	4.8	6.0	27	17	12	9.6	4.6	6.1	1.9
15	6.0	7.2	6.7	5.1	6.0	21	16	12	8.8	4.1	5.9	1.8
16	5.4	6.8	6.8	4.8	5.8	18	15	11	8.0	3.7	4.6	2.1
17	5.0	6.8	7.0	6.8	5.3	15	15	11	7.3	3.9	4.4	4.1
18	4.6	6.7	6.8	6.5	4.9	15	15	10	7.3	4.1	4.1	3.9
19	4.2	6.5	6.7	4.8	4.8	16	14	10	7.6	3.7	3.6	4.4
20	4.0	6.3	6.7	4.2	4.9	16	14	9.4	9.0	4.6	3.0	4.6
21	7.0	6.5	7.4	4.4	4.9	14	14	9.2	13	4.4	3.0	5.4
22	22	6.5	6.8	5.1	4.8	34	14	9.0	11	3.7	5.1	4.6
23	19	6.0	6.5	6.0	4.9	46	14	8.8	9.4	3.2	5.1	4.1
24	16	5.8	6.3	4.8	11	41	16	8.0	8.3	3.2	4.6	6.6
25	24	5.8	6.0	4.8	32	35	22	7.8	9.2	3.2	4.6	14
26	25	5.8	6.1	4.8	22	30	22	7.3	10	3.0	4.1	13
27	27	5.8	6.1	4.8	16	27	23	6.8	9.2	2.7	3.6	12
28	25	6.1	6.1	4.6	13	24	20	6.6	8.3	2.3	3.4	9.4
29	18	7.0	6.0	7.0	---	23	18	6.6	8.8	2.3	3.4	7.6
30	15	6.7	5.8	5.8	---	21	16	6.6	7.8	2.3	2.8	6.4
31	16	---	5.6	5.4	---	19	---	6.4	---	2.7	2.7	---
TOTAL	383.7	235.7	231.2	162.3	195.8	620.3	580	344.5	280.2	134.6	136.2	137.6
MEAN	12.4	7.86	7.46	5.24	6.99	20.0	19.3	11.1	9.34	4.34	4.39	4.59
MAX	27	17	17	7.0	32	46	34	16	19	6.8	6.8	14
MIN	4.0	5.8	5.6	4.2	3.0	8.9	14	6.4	6.4	2.3	2.7	1.8
CFSM	1.68	1.07	1.01	.71	.95	2.71	2.62	1.51	1.27	.59	.60	.62
IN.	1.94	1.19	1.17	.82	.99	3.13	2.93	1.74	1.41	.68	.69	.69

WTR YR 1977 TOTAL 3442.1 MEAN 9.43 MAX 46 MIN 1.8 CFSM 1.28 IN 17.37

NOTE.--No gage-height record Oct. 1 to Nov. 4.

01399200 LAMINGTON (BLACK) RIVER NEAR IRONIA, NJ

LOCATION.--Lat 40°50'07", long 74°38'40", Morris County, Hydrologic Unit 02030105, on left bank 15 ft (4.5 m) upstream from bridge on Ironia Road, 1.0 mi (1.6 km) below Succasunna Brook, 1.3 mi (2.1 km) northwest of Ironia, and 4.4 mi (7.1 km) northeast of Chester.

DRAINAGE AREA.--10.9 mi² (28.23 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1975 to current year.
CHEMICAL ANALYSES: November 1976, February to August 1977.

GAGE.--Water-stage recorder above prefabricated concrete bumper-block control. Altitude of gage is 681 ft (208 m), from topographic map.

REMARKS.--Discharge records fair. Water for municipal supply pumped from wells upstream of gage by Morris County Municipal Utilities Authority.

COOPERATION.--Field data and samples for laboratory analyses supplied by the New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 166 ft³/s (4.70 m³/s) Mar. 23, gage height, 4.18 ft (1.224 m); minimum daily, 2.6 ft³/s (0.07 m³/s) Sept. 16, 17.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 260 ft³/s (7.36 m³/s) July 1, 1976, gage height, 3.98 ft (1.213 m); maximum gage height, 4.18 ft (1.274 m) Mar. 23, 1977; minimum daily discharge, 2.6 ft³/s (0.07 m³/s) Sept. 16, 17, 1977.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	25	9.2	8.6	6.0	23	27	22	12	10	3.7	3.8
2	9.2	21	9.0	8.6	5.8	20	28	21	15	9.2	3.7	3.6
3	13	17	8.8	8.5	5.7	19	40	20	9.6	8.6	6.8	3.4
4	22	15	9.0	8.3	5.7	35	35	20	7.6	8.2	7.1	3.6
5	18	13	9.0	8.2	6.1	58	54	27	7.4	8.2	5.8	3.6
6	15	13	9.0	7.8	7.7	39	51	25	8.0	8.0	5.0	3.6
7	14	12	31	8.0	6.2	29	38	23	11	7.8	4.9	3.4
8	11	11	42	7.8	5.8	24	34	21	9.2	7.6	5.0	3.4
9	20	11	33	7.5	7.0	22	31	23	19	6.0	11	3.4
10	25	11	23	8.7	5.5	21	29	23	38	5.4	9.4	3.2
11	23	11	19	9.0	5.8	20	28	20	32	5.0	7.2	3.2
12	18	11	17	8.3	6.5	20	27	19	19	5.0	6.2	3.0
13	11	10	16	7.8	7.8	36	26	18	16	6.0	11	2.8
14	11	10	15	7.6	9.6	58	25	17	14	5.0	14	2.7
15	9.4	10	12	8.0	10	40	24	16	12	4.7	12	2.6
16	7.6	9.8	12	7.7	10	30	23	16	11	4.4	8.0	2.6
17	7.0	9.8	13	11	9.8	25	22	15	9.8	4.5	7.2	11
18	6.6	10	13	10	9.4	24	22	15	9.6	4.7	5.6	9.2
19	5.6	10	12	7.6	9.3	27	22	14	10	4.3	5.2	8.4
20	9.0	9.8	12	6.8	9.2	27	21	13	10	5.1	4.0	9.0
21	32	9.4	16	6.8	9.0	25	21	13	21	4.9	3.4	13
22	31	9.4	17	7.2	8.8	66	20	12	18	4.4	7.0	10
23	24	9.2	12	8.4	8.8	134	20	12	14	4.0	8.6	7.8
24	20	8.4	9.8	6.8	9.3	62	23	11	12	3.8	6.8	10
25	21	8.4	8.8	6.8	91	50	36	11	13	3.8	7.2	25
26	25	8.6	9.4	6.8	56	41	33	9.6	15	3.7	6.2	28
27	25	9.2	9.6	6.8	35	37	36	9.2	11	3.4	5.4	26
28	21	9.6	9.6	6.7	29	34	31	8.6	9.0	3.1	4.8	22
29	17	14	9.2	10	---	33	26	8.6	11	3.1	4.6	13
30	14	12	9.0	8.4	---	32	23	8.8	11	3.1	3.6	10
31	20	---	8.5	7.8	---	29	---	9.0	---	3.4	4.0	---
TOTAL	514.0	348.6	442.9	248.3	395.8	1140	876	500.8	415.2	168.4	204.4	254.3
MEAN	16.6	11.6	14.3	8.01	14.1	36.8	29.2	16.2	13.8	5.43	6.59	8.48
MAX	32	25	42	11	91	134	54	27	38	10	14	28
MIN	5.6	8.4	8.5	6.7	5.5	19	20	8.6	7.4	3.1	3.4	2.6
CFSM	1.52	1.06	1.31	.74	1.29	3.38	2.68	1.49	1.27	.50	.61	.78
IN.	1.75	1.19	1.51	.85	1.35	3.89	2.99	1.71	1.42	.57	.70	.87

CAL YR 1976 TOTAL 6562.6 MEAN 17.9 MAX 208 MIN 5.6 CFSM 1.64 IN 22.39
WTR YR 1977 TOTAL 5508.7 MEAN 15.1 MAX 134 MIN 2.6 CFSM 1.39 IN 18.80

NOTE.--No gage-height record Jan. 11-Feb. 24.

01399200 LAMINGTON (BLACK) RIVER NEAR IRONIA, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
NOV 18...	1130	9.8	363	7.4	5.5	2	9.4	7.0	1300	240
FEB 15...	1030	12	427	7.3	3.0	5	7.9	--	<20	2
MAR 16...	1100	30	330	7.0	9.0	3	7.9	2.0	130	130
APR 13...	1015	25	323	7.4	14.0	4	10.8	1.0	<20	2
MAY 12...	1050	19	334	7.5	14.0	3	9.3	<.5	230	8
JUN 14...	1050	13	349	7.4	20.0	2	7.0	3.0	50	<2
JUL 14...	1030	3.6	353	7.4	21.0	1	7.4	1.0	490	240
AUG 08...	1030	E5.0	305	7.3	20.0	1	4.9	--	170	33

DATE	HARDNESS (CA+MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV 18...	95	23	9.0	30	2.8	26	31	191	6
FEB 15...	98	24	9.2	43	3.2	26	57	252	15
MAR 16...	82	21	7.2	31	1.7	22	33	159	9
APR 13...	81	20	7.6	27	2.1	22	31	193	9
MAY 12...	110	28	8.8	28	2.5	24	32	194	16
JUN 14...	100	25	9.4	30	2.8	26	33	202	3
JUL 14...	99	24	9.6	29	2.7	23	32	198	9
AUG 08...	97	23	9.7	28	3.0	24	31	172	2

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 18...	--	--	--	--	1.4	--	--	--	4.6
FEB 15...	--	--	--	--	2.8	--	.49	--	5.7
MAR 16...	--	--	--	--	1.4	--	.17	--	7.6
APR 13...	--	--	--	--	1.3	--	.23	--	3.0
MAY 12...	--	--	--	--	1.4	--	.33	--	5.8
JUN 14...	--	--	--	--	1.4	--	.33	--	6.4
JUL 14...	1.3	.05	.04	.57	.61	1.9	.65	.23	6.3
AUG 08...	1.6	.48	.31	.63	.94	3.0	.67	.61	3.8

01399300 LAMINGTON RIVER AT MILLTOWN, NJ

LOCATION.--Lat 40°47'13", long 74°43'13", Morris County, Hydrologic Unit 02030105, at bridge on Furnace Road, 0.1 mi (0.2 km) downstream from Tanners Brook, 0.6 mi (1.0 km) north of Milltown, and 1.5 mi (2.4 km) west of Chester.

DRAINAGE AREA.--23.2 mi² (60.0 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: November 1976 to August 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
NOV									
18...	1430	270	8.0	4.0	4	10.1	2.0	130	170
FEB									
15...	1130	292	6.9	.0	5	9.3	--	50	110
MAR									
16...	1200	181	6.6	11.0	2	7.5	3.0	50	70
APR									
13...	1125	211	7.5	16.5	2	12.1	1.0	20	<2
MAY									
12...	1230	223	7.3	15.0	3	9.1	1.0	1300	17
JUN									
14...	1130	205	7.1	21.0	2	8.4	1.0	<20	140
JUL									
14...	1130	250	7.0	21.5	1	7.1	1.0	170	350
AUG									
08...	1220	235	7.0	21.0	2	4.0	--	790	170

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV									
18...	75	18	7.3	21	2.4	21	22	143	3
FEB									
15...	61	15	5.6	29	3.2	18	44	177	9
MAR									
16...	39	10	3.4	17	1.1	16	22	93	9
APR									
13...	56	14	5.2	17	1.6	17	21	126	6
MAY									
12...	78	21	6.2	18	1.6	16	21	126	10
JUN									
14...	65	16	6.0	18	1.2	19	21	131	6
JUL									
14...	70	17	6.6	20	1.4	15	25	144	6
AUG									
08...	79	20	7.1	18	2.0	26	22	149	4

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV									
18...	--	--	--	--	1.4	--	--	--	4.6
FEB									
15...	--	--	--	--	2.5	--	.33	--	7.5
MAR									
16...	--	--	--	--	1.4	--	.04	--	7.5
APR									
13...	--	--	--	--	1.3	--	.06	--	2.6
MAY									
12...	--	--	--	--	1.3	--	.13	--	6.1
JUN									
14...	--	--	--	--	1.4	--	.07	--	6.7
JUL									
14...	.77	.01	.05	.53	.58	1.4	.25	.20	4.8
AUG									
08...	.27	.01	.04	.66	.70	.98	.25	.14	4.7

01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, NJ

LOCATION.--Lat 40°43'39", long 74°43'50", Morris County, Hydrologic Unit 02030105, on right bank 1.1 mi (1.8 km) upstream from bridge on State Highway 512, 1.2 mi (1.9 km) northwest of Pottersville, and 5.5 mi (8.8 km) upstream from Cold Brook.

DRAINAGE AREA.--32.8 mi² (85.0 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1921 to current year. Monthly discharge only for October and November 1921, published in WSP 1302. Prior to October 1952, published as "Black River near Pottersville".
CHEMICAL ANALYSES: November 1976, February to August 1977.

REVISED DISCHARGE RECORDS.--WSP 741: 1932. WSP 781: Drainage area. WSP 1552: 1922, 1924-29(M), 1931(M), 1933-34(M), 1938(P), 1939(M), 1940, 1941(M), 1942-46(P), 1947(M), 1948-49(P), 1951-52(P), 1953(M).

GAGE.--Water-stage recorder. Concrete control since July 1, 1937. Datum of gage is 284.14 ft (86.606 m) NGVD (levels from New Jersey Geological Survey bench mark). Prior to July 1, 1922, nonrecording gage on downstream side of highway bridge at Pottersville, 1.1 mi (1.8 km) downstream at different datum.

REMARKS.--Discharge records good. Flow regulated occasionally by pond above station.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--56 years, 55.3 ft³/s (1.566 m³/s), 22.90 in/yr (582 mm/yr).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 380 ft³/s (10.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 24	2300	*842	23.8	3.78	1.152
Mar. 22	1515	768	21.7	3.68	1.122
Apr. 5	0315	484	13.7	3.24	0.988

Minimum discharge, 5.1 ft³/s (0.14 m³/s) July 19, 20, gage height, 1.36 ft (0.415 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,700 ft³/s (76.5 m³/s) Aug. 28, 1971 (gage height, 5.39 ft or 1.643 m) from rating curve extended above 380 ft³/s (10.8 m³/s) on basis of slope-area measurement at gage height, 4.71 ft (1.436 m); minimum, 1.3 ft³/s (0.037 m³/s) Oct. 4, 1930.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	54	24	21	15	104	102	73	35	25	10	12
2	41	47	23	21	15	78	124	66	43	23	11	12
3	38	48	22	21	16	56	157	61	37	22	17	11
4	50	50	21	22	17	170	133	59	29	21	20	10
5	41	43	20	21	16	140	296	101	25	20	20	10
6	35	39	25	20	20	120	218	91	27	22	22	10
7	34	35	40	20	17	95	191	73	31	24	23	10
8	33	32	76	20	15	82	163	70	29	26	20	9.6
9	31	30	62	29	17	75	140	82	56	22	43	9.6
10	35	29	53	37	15	68	124	72	105	21	37	9.6
11	36	28	52	32	19	64	112	64	94	18	34	8.6
12	37	26	47	23	25	62	103	56	74	21	27	8.2
13	38	26	37	16	41	80	96	50	42	26	33	8.2
14	36	25	37	16	46	100	89	44	31	23	32	8.2
15	32	24	29	34	36	150	83	40	25	20	28	7.7
16	28	24	29	34	44	130	77	39	26	17	26	11
17	24	23	28	27	64	120	73	37	25	16	24	17
18	20	23	26	15	78	116	69	45	25	15	21	13
19	18	23	26	16	34	111	66	45	27	12	18	14
20	65	23	26	15	30	102	63	39	26	15	15	20
21	80	23	32	16	27	99	61	35	44	16	14	20
22	53	22	26	15	26	301	59	33	35	15	25	19
23	59	21	25	14	29	316	58	32	30	14	21	20
24	68	20	24	15	145	294	78	30	26	13	19	35
25	70	19	24	16	275	242	103	29	40	13	26	70
26	81	19	25	15	169	190	120	28	60	13	21	51
27	57	20	26	15	172	161	152	26	45	12	18	53
28	50	22	23	14	142	145	120	25	35	12	16	53
29	47	25	22	15	---	134	105	23	33	11	15	47
30	44	26	22	18	---	122	88	25	28	10	13	44
31	80	---	21	16	---	113	---	24	---	9.7	12	---
TOTAL	1397	869	973	629	1565	4140	3423	1517	1188	547.7	681	631.7
MEAN	45.1	29.0	31.4	20.3	55.9	134	114	48.9	39.6	17.7	22.0	21.1
MAX	81	54	76	37	275	316	296	101	105	26	43	70
MIN	18	19	20	14	15	56	58	23	25	9.7	10	7.7
CFSM	1.38	.88	.96	.62	1.70	4.09	3.48	1.49	1.21	.54	.67	.64
IN.	1.58	.99	1.10	.71	1.77	4.70	3.88	1.72	1.35	.62	.77	.72

CAL YR 1976 TOTAL 17830.3 MEAN 48.7 MAX 401 MIN 8.1 CFSM 1.49 IN 20.23
WTR YR 1977 TOTAL 17561.4 MEAN 48.1 MAX 316 MIN 7.7 CFSM 1.47 IN 19.92

01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
NOV 17...	1400	23	229	8.1	3.5	2	12.6	<.5	20	11
FEB 01...	1330	30	249	7.2	2.0	1	14.7	3.0	40	<2
MAR 16...	1325	E130	158	7.2	11.0	3	11.2	1.0	<20	49
APR 13...	1220	97	185	7.6	16.5	2	11.0	<.5	<20	9
MAY 12...	1330	56	195	7.6	15.0	3	10.3	1.0	230	13
JUN 14...	1300	E31	178	7.7	20.5	2	9.3	.5	20	1600
JUL 14...	1300	23	205	7.7	21.0	1	9.2	1.0	270	540
AUG 08...	1345	20	218	8.0	21.0	1	8.7	--	460	920

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTERABLE RESIDUE (MG/L)
NOV 17...	63	15	6.3	16	2.0	19	19	139	8
FEB 01...	75	18	7.4	20	2.0	20	20	145	0
MAR 16...	37	8.7	3.6	13	1.4	15	18	80	18
APR 13...	52	13	4.8	14	1.4	16	17	116	8
MAY 12...	60	15	5.4	14	1.4	16	17	111	9
JUN 14...	57	14	5.4	16	1.1	18	19	140	6
JUL 14...	62	15	5.9	15	1.6	14	17	122	8
AUG 08...	69	17	6.4	16	1.9	27	19	132	10

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 17...	--	--	.00	1.1	1.1	--	--	--	--
FEB 01...	--	--	--	--	1.3	--	.33	--	2.6
MAR 16...	--	--	--	--	1.4	--	.07	--	8.3
APR 13...	--	--	--	--	1.1	--	.05	--	2.0
MAY 12...	--	--	--	--	1.1	--	.08	--	7.1
JUN 14...	--	--	--	--	1.3	--	.05	--	4.9
JUL 14...	1.0	.00	.02	.40	.42	1.4	.13	.10	5.7
AUG 08...	.50	.00	.01	.67	.68	1.2	.13	.09	5.2

01399510 UPPER COLD BROOK NEAR POTTERSVILLE, NJ

LOCATION.--Lat 40°43'16", long 74°45'09", Hunterdon County, Hydrologic Unit 02030105, on right bank along a private dirt road, 400 ft (122 m) downstream from the Pottersville Reservoir, and 1.5 mi (2.4 km) west of Pottersville.

DRAINAGE AREA.--2.18 mi² (5.65 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1972 to current year.

GAGE.--Water-stage recorder above a rock outcrop control. Datum of gage is 451.57 ft (137.639 m) NGVD.

REMARKS.--Discharge records good. Flow regulated by Pottersville Reservoir 400 ft (122 m) above station.

AVERAGE DISCHARGE.--5 years, 3.88 ft³/s (0.110 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 123 ft³/s (3.48 m³/s) Feb. 25, gage height, 2.44 ft (0.744 m), from high-water mark in gage house; minimum daily, 0.33 ft³/s (0.011 m³/s) Sept. 3, 11, 12, 15.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 197 ft³/s (5.58 m³/s) July 20, 1975, gage height, 2.85 ft (0.869 m); minimum daily, 0.08 ft³/s (0.002 m³/s) Sept. 15, 1976.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	2.5	1.1	1.2	1.3	3.3	4.7	3.0	3.3	1.2	.74	.49
2	1.3	1.9	1.1	1.2	1.6	2.6	11	3.0	2.5	1.2	.74	.41
3	3.2	1.9	1.0	1.4	1.3	2.4	8.6	2.8	1.5	1.1	1.7	.33
4	3.0	1.7	.92	1.9	1.7	20	6.2	3.3	1.5	.99	1.2	.41
5	1.3	1.6	1.0	1.3	1.3	9.9	30	13	1.3	.99	.82	.45
6	.90	1.5	1.1	1.4	1.1	5.2	10	7.2	1.7	.99	.67	.49
7	.80	1.4	11	1.6	1.0	4.0	8.2	4.3	1.8	1.8	1.2	.37
8	.72	1.4	2.8	1.3	.94	3.3	7.2	3.7	1.5	1.7	.90	.41
9	.79	1.4	1.7	1.7	.92	3.0	6.6	5.2	7.0	1.3	2.2	.45
10	1.3	1.4	1.6	2.0	.93	2.9	6.0	4.2	4.7	1.1	2.2	.41
11	1.1	1.4	1.6	1.4	1.0	2.6	5.6	3.3	2.0	1.1	1.3	.33
12	1.0	1.4	1.6	1.0	1.6	2.5	5.4	2.9	1.6	2.1	.82	.33
13	.92	1.4	1.4	.86	2.2	23	4.8	2.6	1.5	1.6	1.5	.37
14	.76	1.4	1.2	1.3	2.6	11	4.3	2.4	1.5	1.2	1.2	.41
15	.76	1.3	1.3	1.7	1.9	6.4	4.0	2.2	1.5	.90	.90	.33
16	.76	1.3	1.4	1.9	2.5	5.6	3.8	2.0	1.4	.74	.82	1.2
17	.76	1.3	1.4	1.1	3.3	4.7	3.5	2.0	1.3	.74	.90	1.2
18	.67	1.3	1.4	.76	4.5	6.0	3.4	7.9	1.3	.74	.67	.67
19	.67	1.3	1.3	1.0	1.8	6.2	3.3	4.2	1.2	.74	.60	.74
20	7.0	1.3	1.5	1.3	1.5	5.0	3.1	2.5	1.4	1.5	.54	.99
21	6.4	1.2	1.7	1.1	1.3	4.5	3.1	2.1	1.5	.99	.49	.67
22	1.9	1.2	1.2	.96	1.2	37	3.0	1.8	1.2	.82	1.6	.60
23	1.4	1.2	1.1	1.1	3.5	17	2.9	1.7	1.2	.67	.90	.99
24	1.9	1.1	1.0	1.2	9.0	9.9	5.8	1.6	1.2	.67	.74	2.9
25	2.2	1.1	1.0	1.1	19	8.2	5.6	1.6	8.6	.90	.74	5.2
26	5.8	1.1	1.2	1.0	7.2	7.2	8.2	1.5	3.5	.90	.54	1.6
27	2.0	1.2	1.1	.95	6.2	6.8	6.4	1.5	1.7	.67	.49	1.4
28	1.8	1.1	1.2	.92	5.0	6.6	4.3	1.4	1.6	.60	.49	1.2
29	1.6	1.6	1.2	1.0	---	6.2	3.8	1.4	1.6	.60	.45	.82
30	1.4	1.2	1.1	1.2	---	5.6	3.3	1.5	1.2	.67	.45	.67
31	6.6	---	1.1	1.1	---	5.2	---	1.4	---	.54	.45	---
TOTAL	62.61	42.1	50.32	38.95	87.39	243.8	186.1	99.2	64.8	31.76	28.96	26.84
MEAN	2.02	1.40	1.62	1.26	3.12	7.86	6.20	3.20	2.16	1.02	.93	.89
MAX	7.0	2.5	11	2.0	19	37	30	13	8.6	2.1	2.2	5.2
MIN	.67	1.1	.92	.76	.92	2.4	2.9	1.4	1.2	.54	.45	.33

CAL YR 1976 TOTAL 922.15 MEAN 2.52 MAX 45 MIN .08
WTR YR 1977 TOTAL 962.83 MEAN 2.64 MAX 37 MIN .33

01399545 LAMINGTON RIVER AT LAMINGTON, NJ

LOCATION.--Lat 40°39'38", long 74°43'46", Somerset County, Hydrologic Unit 02030105, 0.4 mi (0.6 km) downstream from Cold Brook, 0.6 mi (1.0 km) west of Lamington, and 3.8 mi (6.1 km) south of Potterstown.

DRAINAGE AREA.--53.6 mi² (138.8 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: November 1976 to August 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
NOV 17...	1430	237	7.8	3.0	2	14.0	<.5	70	49
FEB 23...	1215	242	7.6	.0	1	8.2	3.0	<20	130
APR 13...	1340	180	9.0	--	3	--	1.0	110	27
MAY 12...	1430	188	8.7	12.0	2	12.4	1.0	130	33
JUN 14...	1355	195	7.9	20.0	2	9.6	1.0	<20	920
JUL 14...	1400	211	8.1	25.0	1	9.3	<.5	790	130
AUG 08...	1430	215	8.5	23.0	2	9.4	--	170	23

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV 17...	75	18	7.4	14	1.8	20	16	138	13
FEB 23...	71	17	7.0	15	1.9	19	22	140	0
APR 13...	59	15	5.2	12	1.5	17	15	114	2
MAY 12...	73	15	8.7	12	1.4	17	15	116	0
JUN 14...	58	14	5.7	14	1.0	19	17	131	2
JUL 14...	70	17	6.6	12	1.7	15	15	118	5
AUG 08...	74	18	7.0	13	1.9	24	17	136	1

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 17...	--	--	--	--	1.1	--	--	--	--
FEB 23...	--	--	--	--	.00	--	.26	--	2.6
APR 13...	--	--	--	--	1.0	--	.03	--	2.2
MAY 12...	--	--	--	--	1.1	--	.05	--	7.2
JUN 14...	--	--	--	--	1.3	--	.07	--	5.4
JUL 14...	.86	.01	.04	.25	.29	1.2	.09	.06	6.5
AUG 08...	.52	.01	.04	1.1	1.1	1.6	.09	.07	4.9

01399550 LAMINGTON RIVER NEAR WHITEHOUSE, NJ

LOCATION.--Lat 40°38'02", long 74°43'38", Hunterdon County, Hydrologic Unit 02030105 on right bank at bridge on Halls Bridge Road, 1.1 mi (1.8 km) upstream from Rockaway Creek, 1.5 mi (2.4 km) northeast of Whitehouse, and 2.1 mi (3.4 km) west of Burnt Mills.

DRAINAGE AREA.--57.3 mi² (148.4 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1964, March to September 1977.
CHEMICAL ANALYSES: Water years 1964, March to July 1977.
SEDIMENT ANALYSES: March to July 1977.

REMARKS.--Site is sampled as part of a project to study the effect of supplemental releases from Round Valley Reservoir to the South Branch Rockaway Creek.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	COD IN BOTTOM MATERIAL (MG/KG)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	HARDNESS (CA,MG) (MG/L)
MAR 13...	1623	98	7.1	11.5	160	9.9	67	--	4.7	>1200	B46000	36
APR 19...	1125	157	9.3	14.5	2	13.6	10	3100	1.2	860	B140	62
JUN 25...	2145	97	7.0	21.0	40	8.3	140	--	7.9	41000	B110000	32
JUL 05...	1250	240	8.5	24.0	1	12.8	5	2600	1.6	B2200	580	79

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
MAR 13...	20	7.8	4.1	5.7	1.9	20	0	16	2.5	--	14
APR 19...	19	15	6.0	11	1.4	44	4	43	.0	.0	20
JUN 25...	10	7.9	2.9	5.8	2.2	27	0	22	4.3	--	11
JUL 05...	15	19	7.6	14	1.4	72	3	64	.4	.0	16

DATE	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE IN BOT. MAT. (MG/KG)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)	TOTAL AMMONIA NITROGEN IN BOTTOM MAT. (MG/KG)
MAR 13...	8.1	--	--	--	66	--	--	--	--	.02	--
APR 19...	15	.1	.1	6.0	114	--	--	--	2.4	.00	6.6
JUN 25...	6.2	--	--	--	70	--	--	--	--	.00	--
JUL 05...	16	.1	.1	9.8	152	1	.88	.01	3.6	.01	5.4

DATE	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN IN BOTTOM MATERIAL (N) (MG/KG)	DISSOLVED PHOSPHORUS (P) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS IN BOTTOM MATERIAL (MG/KG)	TOTAL ORGANIC CARBON (C) (MG/L)	DISSOLVED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)	INORGANIC CARBON IN BOTTOM MATERIAL (G/KG)
MAR 13...	.53	.55	--	--	.03	--	--	--	5.2	--	--
APR 19...	.14	.14	500	500	.01	--	110	--	1.4	.8	.1
JUN 25...	1.0	1.0	--	--	.30	--	--	--	6.3	--	--
JUL 05...	.26	.27	450	450	.06	.04	37	5.7	3.1	1.0	.0

01399550 LAMINGTON RIVER NEAR WHITEHOUSE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC IN BOTTOM MA-TERIAL (UG/G)	DIS-SOLVED BARIUM (BA) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CADMIUM IN BOTTOM MA-TERIAL (UG/G)	TOTAL CHRO-MIUM IN BOTTOM MA-TERIAL (UG/G)	TOTAL COBALT IN BOTTOM MA-TERIAL (UG/G)	TOTAL COPPER IN BOTTOM MA-TERIAL (UG/G)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MA-TERIAL (UG/G)
APR											
19...	1125	160	5	0	30	<10	<10	<10	<10	100	1700
JUL											
05...	1250	50	3	0	60	<10	<10	<10	<10	30	520

DATE	TOTAL LEAD IN BOTTOM MA-TERIAL (UG/G)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL MANGA-NESE IN BOTTOM MA-TERIAL (UG/G)	TOTAL MERCURY IN BOTTOM MA-TERIAL (UG/G)	TOTAL NICKEL IN BOTTOM MA-TERIAL (UG/G)	DIS-SOLVED STRON-TIUM (SR) (UG/L)	TOTAL ZINC IN BOTTOM MA-TERIAL (UG/G)	PCB IN BOTTOM MA-TERIAL (UG/KG)	ALDRIN IN BOTTOM MA-TERIAL (UG/KG)
APR										
19...	<10	0	20	290	.0	<10	190	20	0	.0
JUL										
05...	<10	0	10	230	.1	<10	90	<10	0	.0

DATE	CHLOR-DANE IN BOTTOM MA-TERIAL (UG/KG)	DDD IN BOTTOM MA-TERIAL (UG/KG)	DDE IN BOTTOM MA-TERIAL (UG/KG)	DDT IN BOTTOM MA-TERIAL (UG/KG)	DI-ELDRIN IN BOTTOM MA-TERIAL (UG/KG)	ENDRIN IN BOTTOM MA-TERIAL (UG/KG)	HEPTA-CHLOR IN BOTTOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE IN BOT-TOM MA-TERIAL (UG/KG)	LINDANE IN BOTTOM MA-TERIAL (UG/KG)	TOX-APHENE IN BOTTOM MA-TERIAL (UG/KG)
APR										
19...	0	.0	.0	.0	.0	.0	.0	.0	.0	0
JUL										
05...	0	.0	.0	.0	.0	.0	.0	.0	.0	0

SEDIMENT DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM
OCT							
20...	1220	55	8.0	5	.74	--	--
20...	1355	57	9.0	4	.62	--	--
20...	1510	61	9.0	4	.66	--	--
20...	1645	65	10.0	9	1.6	--	--
DEC							
07...	0105	83	.5	13	2.9	--	--
07...	0230	83	--	5	1.1	--	--
07...	0530	83	1.0	4	.90	--	--
07...	0800	91	--	12	2.9	--	--
07...	0910	103	1.5	17	4.7	--	--
07...	1145	183	.5	96	47	--	--
07...	1610	--	1.0	370	--	--	--
20...	1535	59	--	14	2.2	--	--
FEB							
25...	1640	--	2.0	406	--	--	--
27...	1435	243	6.0	22	14	--	--
MAR							
04...	1510	650	3.5	820	1440	33	48
13...	0810	93	10.0	2	.50	--	--
13...	0855	101	--	7	1.9	--	--
13...	1045	186	10.5	46	23	--	--
13...	1200	399	11.0	249	268	--	--
13...	1400	--	11.0	1440	--	--	--
13...	1625	--	--	614	--	--	--
13...	1800	--	11.0	333	--	--	--
18...	1155	162	4.5	18	7.9	--	--
18...	1345	177	4.0	26	12	--	--
18...	1545	201	4.5	28	15	--	--
APR							
19...	1125	98	14.5	5	1.3	--	--
JUN							
06...	1330	35	--	6	.57	--	--
06...	2025	43	--	12	1.4	--	--
08...	1435	41	18.0	6	.66	--	--
09...	1220	71	14.0	23	4.4	--	--
09...	1430	129	--	89	31	--	--
09...	1550	147	--	116	46	--	--
09...	1740	138	--	88	33	--	--
09...	1955	138	--	83	31	--	--
09...	2150	156	--	89	37	--	--
10...	1020	156	14.0	63	27	--	--
10...	1145	150	14.5	60	24	--	--
10...	1245	150	14.5	57	23	--	--
10...	1425	144	15.5	52	20	--	--

01399550 LAMINGTON RIVER NEAR WHITEHOUSE, NJ--Continued

SEDIMENT DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
OCT						
20...	--	--	--	--	--	--
20...	--	--	--	--	--	--
20...	--	--	--	--	--	--
20...	--	--	--	--	--	--
DEC						
07...	--	--	--	--	--	--
07...	--	--	--	--	--	--
07...	--	--	--	--	--	--
07...	--	--	--	--	--	--
07...	--	--	--	--	--	--
07...	--	--	--	--	--	--
07...	--	--	--	--	--	--
20...	--	--	--	--	--	--
FEB						
25...	--	--	--	--	--	--
27...	--	--	--	--	--	--
MAR						
04...	69	87	95	97	99	100
13...	--	--	--	--	--	--
13...	--	--	--	--	--	--
13...	--	--	--	--	--	--
13...	--	--	--	--	--	--
13...	--	--	--	--	--	--
13...	--	--	--	--	--	--
13...	--	--	--	--	--	--
18...	--	--	--	--	--	--
18...	--	--	--	--	--	--
18...	--	--	--	--	--	--
APR						
19...	--	--	--	--	--	--
JUN						
06...	--	--	--	--	--	--
06...	--	--	--	--	--	--
08...	--	--	--	--	--	--
09...	--	--	--	--	--	--
09...	--	--	--	--	--	--
09...	--	--	--	--	--	--
09...	--	--	--	--	--	--
09...	--	--	--	--	--	--
09...	--	--	--	--	--	--
10...	--	--	--	--	--	--
10...	--	--	--	--	--	--
10...	--	--	--	--	--	--
10...	--	--	--	--	--	--

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
JUN											
22...	1355	43	21.0	7	.81	--	--	--	--	--	--
25...	1620	32	20.0	4	.35	--	--	--	--	--	--
25...	1835	141	--	246	94	--	--	--	--	--	--
25...	1930	E600	--	2020	--	--	--	--	--	--	--
25...	2145	E500	21.0	1320	--	--	--	--	--	--	--
25...	2240	340	18.0	154	141	48	73	88	96	99	100
26...	0005	258	--	486	339	--	--	--	--	--	--
26...	0230	159	19.0	272	117	--	--	--	--	--	--
26...	1240	98	21.0	44	12	--	--	--	--	--	--
JUL											
02...	1045	35	21.0	3	.28	--	--	--	--	--	--
05...	1250	26	24.0	3	.21	--	--	--	--	--	--
11...	1910	28	23.0	33	2.5	--	--	--	--	--	--
14...	1730	35	27.0	5	.47	--	--	--	--	--	--
26...	0845	23	19.5	4	.25	--	--	--	--	--	--
SEP											
08...	1220	13	20.0	3	.11	--	--	--	--	--	--

01399575 ROCKAWAY CREEK NEAR POTTERSTOWN, NJ

LOCATION.--Lat 40°38'36", long 74°45'38", Hunterdon County, Hydrologic Unit 02030105, on right bank at bridge on State Highway 523, 1.3 mi (2.1 km) south of McCrea Mills, 1.6 mi (2.6 km) upstream from South Branch Rockaway Creek, and 2.0 mi (3.2 km) east of Potterstown.

DRAINAGE AREA.--18.5 mi^2 (47.9 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: December 1976 to September 1977.
CHEMICAL ANALYSES: March to July 1977.
SEDIMENT ANALYSES: March to July 1977.

REMARKS.--Site is sampled as part of a project to study the effects of supplemental releases from Round Valley Reservoir to the South Branch Rockaway Creek.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	COD IN BOTTOM MA-TERIAL (MG/KG)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM .7UM-MF (COL./ 100 ML)	FECAL STREP-TOCOCCI KF AGAR (COL. PER 100 ML)	HARD-NESS (CA,MG) (MG/L)
MAR 13...	1038	141	7.2	10.0	55	10.8	25	--	2.3	600	K2800	44
APR 19...	0910	137	8.0	11.0	2	12.6	7	5400	.6	8100	8120	49
JUN 25...	1807	70	7.1	19.0	170	9.1	22	--	7.7	59000	78000	16
JUL 05...	1135	164	7.3	21.5	1	10.2	11	3400	1.1	81400	940	61

DATE	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOL-VED SUL-FIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
MAR 13...	22	11	4.0	8.1	1.4	27	0	22	2.7	--	17
APR 19...	23	12	4.6	5.2	1.2	32	0	26	.5	.0	17
JUN 25...	0	2.8	2.2	3.9	2.1	20	0	16	2.5	--	8.1
JUL 05...	22	15	5.6	6.2	1.4	48	0	39	3.8	.0	15

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE IN BOT. MAT. (MG/KG)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	TOTAL AMMONIA NITRO-GEN IN BOTTOM MAT. (MG/KG)
MAR 13...	13	--	--	--	84	--	--	--	--	.01	--
APR 19...	6.0	.1	.0	14	90	2	--	--	.0	.00	5.4
JUN 25...	4.1	--	--	--	55	--	--	--	--	.00	--
JUL 05...	6.4	.1	.0	17	125	2	1.3	.00	2.4	.00	3.5

DATE	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L)	TOTAL KJEL. NITRO-GEN IN BOTTOM MAT. (MG/KG)	TOTAL NITRO-GEN IN BOTTOM MATERI-AL (N) (MG/KG)	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS IN BOT-TOM MA-TERIAL (MG/KG)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOL-VED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOT-TOM MA-TERIAL (C) (G/KG)	IN-ORGANIC CARBON IN BOT-TOM MA-TERIAL (G/KG)
MAR 13...	.20	.21	--	--	.01	--	--	--	7.3	--	--
APR 19...	.23	.23	640	640	.00	--	170	--	.6	1.8	.0
JUN 25...	1.1	1.1	--	--	.14	--	--	--	8.2	--	--
JUL 05...	.15	.15	370	370	.01	.00	160	4.9	2.0	1.0	.0

01399575 ROCKAWAY CREEK NEAR POTTERSTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	TOTAL ARSENIC IN BOTTOM MA- TERIAL (UG/G)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	TOTAL CADMIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL CHRO- MIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL COBALT IN BOTTOM MA- TERIAL (UG/G)	TOTAL COPPER IN BOTTOM MA- TERIAL (UG/G)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MA- TERIAL (UG/G)
APR											
19...	0910	140	5	0	40	<10	<10	<10	<10	70	1900
JUL											
05...	1135	60	2	0	20	<10	<10	<10	<10	40	550

DATE	TOTAL LEAD IN BOTTOM MA- TERIAL (UG/G)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MANGA- NESE IN BOTTOM MA- TERIAL (UG/G)	TOTAL MERCURY IN BOTTOM MA- TERIAL (UG/G)	TOTAL NICKEL IN BOTTOM MA- TERIAL (UG/G)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	TOTAL ZINC IN BOTTOM MA- TERIAL (UG/G)	PCB IN BOTTOM MA- TERIAL (UG/KG)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)
APR										
19...	<10	0	10	180	.4	<10	190	20	0	.0
JUL										
05...	<10	0	10	140	.2	<10	110	10	0	.0

DATE	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	DDD IN BOTTOM MA- TERIAL (UG/KG)	DDE IN BOTTOM MA- TERIAL (UG/KG)	DDT IN BOTTOM MA- TERIAL (UG/KG)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)
APR										
19...	0	.0	.0	.0	.0	.0	.0	.0	.0	0
JUL										
05...	0	.0	.0	.0	.0	.0	.0	.0	.0	0

01399575 ROCKAWAY CREEK NEAR POTTERSTOWN, NJ--Continued

SEDIMENT DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM
OCT								
20...	1125	1.0	8.5	12	.03	--	--	--
20...	1205	1.0	8.0	2	.01	--	--	--
20...	1235	1.1	8.5	4	.01	--	--	--
20...	1355	1.3	9.0	6	.02	--	--	--
20...	1400	1.1	8.5	5	.01	--	--	--
20...	1430	1.3	9.0	2	.01	--	--	--
20...	1725	3.3	9.5	7	.06	--	--	--
20...	1805	4.0	10.0	8	.09	--	--	--
20...	1920	6.7	--	52	.94	--	--	--
DEC								
03...	1220	2.5	.0	9	.06	--	--	--
07...	0010	1.3	1.0	4	.01	--	--	--
07...	0155	1.5	--	3	.01	--	--	--
07...	0445	1.5	1.0	4	.02	--	--	--
07...	0715	3.0	--	5	.04	--	--	--
07...	0835	6.7	1.0	18	.33	--	--	--
07...	1045	58	.0	115	18	--	--	--
07...	1245	210	1.0	832	472	--	--	--
07...	1515	250	2.0	363	245	27	42	57
FEB								
11...	1200	154	--	1	.42	--	--	--
25...	1110	122	2.5	100	33	--	--	--
25...	1325	120	3.5	90	29	--	--	--
25...	1345	119	--	35	11	--	25	40
25...	1400	119	4.0	84	27	--	--	--
27...	1325	60	7.5	9	1.5	--	--	--
MAR								
04...	1535	230	3.5	425	264	25	37	52
13...	0740	40	10.0	4	.43	--	--	--
13...	0825	42	--	2	.23	--	--	--
13...	0930	56	--	23	3.5	--	--	--
13...	1020	81	--	164	36	--	--	--
13...	1125	123	--	364	121	--	--	--
13...	1225	275	--	958	711	--	--	--
13...	1450	550	10.5	735	1090	--	--	--
13...	1720	333	10.5	277	249	--	--	--
13...	1845	216	11.0	175	102	--	--	--
18...	1110	59	4.0	2	.32	--	--	--
18...	1245	65	3.5	6	1.1	--	--	--
18...	1500	74	3.5	23	4.6	--	--	--
APR								
19...	0910	29	11.0	2	.16	--	--	--
JUN								
06...	1300	14	16.0	3	.11	--	--	--

SEDIMENT DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM	SUS. SED. SIEVE DIAM. % FINER THAN 2.00 MM
OCT							
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
DEC							
03...	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--
07...	70	79	83	88	93	100	100
FEB							
11...	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--
25...	54	66	80	82	99	100	--
25...	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--
MAR							
04...	65	77	80	83	92	99	100
13...	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--
APR							
19...	--	--	--	--	--	--	--
JUN							
06...	--	--	--	--	--	--	--

01399575 ROCKAWAY CREEK NEAR POTTERSTOWN, NJ--Continued

SEDIMENT DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM
JUN							
06...	1445	14	--	3	.11	--	--
06...	2005	18	12.0	6	.29	--	--
08...	1335	14	15.5	2	.08	--	--
09...	1100	25	13.0	22	1.5	--	--
09...	1345	42	13.0	48	5.4	--	--
09...	1500	47	--	53	6.7	--	--
09...	1620	53	--	58	8.3	--	--
09...	1820	53	--	61	8.7	--	--
09...	2025	68	--	82	15	--	--
09...	2115	74	--	109	22	--	--
10...	0945	37	13.5	16	1.6	--	--
10...	1100	35	13.5	13	1.2	--	--
10...	1220	32	14.0	9	.78	--	--
10...	1350	30	14.5	9	.73	--	--
22...	1215	9.2	18.5	1	.02	--	--
25...	1600	7.6	18.5	4	.08	--	--
25...	1715	12	--	16	.52	--	--
25...	1807	121	19.0	1010	330	--	--
25...	1900	263	--	1110	788	--	--
25...	1950	443	--	1200	1440	--	--
25...	2030	400	18.0	1510	1630	39	56
25...	2310	118	--	313	100	--	--
26...	0200	64	--	97	17	--	--
26...	1500	23	21.0	13	.81	--	--
JUL							
02...	1000	9.2	19.0	1	.02	--	--
05...	1135	8.1	21.5	3	.07	--	--
11...	1800	8.5	21.5	1	.02	--	--
14...	1710	7.6	25.5	5	.10	--	--
26...	0820	8.5	18.5	2	.05	--	--
SEP							
08...	1115	--	19.0	3	--	--	--

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
JUN						
06...	--	--	--	--	--	--
06...	--	--	--	--	--	--
08...	--	--	--	--	--	--
09...	--	--	--	--	--	--
09...	--	--	--	--	--	--
09...	--	--	--	--	--	--
09...	--	--	--	--	--	--
09...	--	--	--	--	--	--
09...	--	--	--	--	--	--
09...	--	--	--	--	--	--
10...	--	--	--	--	--	--
10...	--	--	--	--	--	--
10...	--	--	--	--	--	--
10...	--	--	--	--	--	--
22...	--	--	--	--	--	--
25...	--	--	--	--	--	--
25...	--	--	--	--	--	--
25...	--	--	--	--	--	--
25...	--	--	--	--	--	--
25...	--	--	--	--	--	--
25...	76	89	95	96	98	100
25...	--	--	--	--	--	--
26...	--	--	--	--	--	--
26...	--	--	--	--	--	--
JUL						
02...	--	--	--	--	--	--
05...	--	--	--	--	--	--
11...	--	--	--	--	--	--
14...	--	--	--	--	--	--
26...	--	--	--	--	--	--
SEP						
08...	--	--	--	--	--	--

01399600 SOUTH BRANCH ROCKAWAY CREEK TRIBUTARY AT LEBANON, NJ

LOCATION.--Lat 40°38'05", long 74°49'58", Hunterdon County, Hydrologic Unit 02030105, at bridge on unnamed road in Lebanon, 0.5 mi (0.8 km) upstream from South Branch Rockaway Creek, and 1.8 mi (2.9 km) west of Potterstown.

DRAINAGE AREA.--1.02 mi² (2.64 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1960-63, 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
OCT 25...	1230	189	7.6	10.0	1	12.6	--	20	49	70	18
FEB 01...	1130	177	6.7	3.0	1	14.0	2.0	<20	<2	64	16
MAR 14...	1115	212	7.0	9.5	5	9.1	--	<20	2	85	23
APR 18...	0950	183	7.2	11.5	1	12.0	--	<20	<2	76	20
MAY 09...	1230	207	7.1	12.0	1	11.1	--	<20	<2	80	21
JUN 13...	1000	212	7.3	17.0	40	8.1	<.5	<20	23	78	21
JUL 21...	1330	189	7.4	10.5	1	10.6	--	20	13	73	19
AUG 09...	1455	183	7.9	15.0	1	8.0	--	<20	350	76	20

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
OCT 25...	6.2	6.5	1.4	.0	19	8.6	16	102	7	--
FEB 01...	5.9	6.7	.6	--	20	7.5	--	101	0	--
MAR 14...	6.6	7.7	.9	--	21	9.7	--	116	10	--
APR 18...	6.3	7.3	.7	--	20	11	--	102	0	--
MAY 09...	6.6	7.0	.6	.0	22	10	16	123	3	--
JUN 13...	6.2	7.9	.6	.0	20	10	16	133	34	--
JUL 21...	6.3	6.8	.8	--	20	8.7	--	121	6	.09
AUG 09...	6.3	7.0	1.0	--	19	8.9	--	118	7	.09

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 25...	--	--	--	.84	550	--	--	--	.6	3.6
FEB 01...	--	--	--	1.1	--	--	.02	--	1.4	--
MAR 14...	--	--	--	1.1	--	--	.00	--	5.7	--
APR 18...	--	--	--	1.0	--	--	.01	--	5.1	--
MAY 09...	--	--	--	.08	--	--	.01	--	2.3	--
JUN 13...	--	--	--	.60	--	--	.06	--	7.4	--
JUL 21...	.00	.00	.26	.26	--	.35	.00	.00	6.9	--
AUG 09...	.00	.01	.30	.31	--	.40	.01	.00	3.6	--

01399600 SOUTH BRANCH ROCKAWAY CREEK TRIBUTARY AT LEBANON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
OCT 25...	1230	110	110	0	0	6	80	0	<10	<10	0
MAY 09...	1230	--	--	30	2	--	20	0	--	--	0
JUN 13...	1000	--	--	40	0	--	50	0	--	--	0

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)
OCT 25...	0	<10	3	50	230	120	17000	6	<10	30	950
MAY 09...	0	--	3	--	--	30	--	0	--	20	--
JUN 13...	6	--	18	--	--	40	--	5	--	160	--

DATE	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT 25...	.1	.1	2	<10	0	20	20	--	20	.0
MAY 09...	.0	--	3	--	0	80	--	1	--	--
JUN 13...	.0	--	14	--	0	50	--	0	--	--

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT 25...	0	.0	.0	.0	.0	.0	.0	.0	.0	0
MAY 09...	--	--	--	--	--	--	--	--	--	--
JUN 13...	--	--	--	--	--	--	--	--	--	--

01399690 SOUTH BRANCH ROCKAWAY CREEK AT WHITEHOUSE, NJ

LOCATION.--Lat 40°37'24", long 74°46'01", Hunterdon County, Hydrologic Unit 02030105, on right upstream wingwall of bridge on U.S. Route 22, 0.3 mi (0.5 km) upstream from mouth, 0.6 mi (1.0 km) north of Whitehouse Station, and 0.9 mi (1.5 km) west of Whitehouse.

DRAINAGE AREA.--13.2 mi^2 (34.2 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1964-67, March to September 1977.
CHEMICAL ANALYSES: Water years 1964-67, March to September 1977.
SEDIMENT ANALYSES: March to September 19772

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: March to September 1977.
SPECIFIC CONDUCTANCE: May to September 1977.
WATER TEMPERATURES: May to September 1977.
SEDIMENT ANALYSES: October 1976 to September 1977.

GAGE.--Water-stage recorder. Datum of gage is 113.55 ft (34.61 m) NGVD.

REMARKS.--Discharge records good. Flow regulated by Round Valley Reservoir. Missing continuous water-quality records are the result of malfunction of sensor or sampling mechanism. Site was sampled as part of a project to study the effect of supplemental releases from Round Valley Reservoir to the South Branch Rockaway Creek.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period March to September, 948 ft^3/s (26.8 m^3/s) Mar. 22, gage height, 10.69 ft (3.258 m); minimum, 2.8 ft^3/s (0.11 m^3/s) Sept. 15, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						22	15	15	9.0	7.5	10	4.3
2						18	44	15	9.0	6.0	7.5	3.9
3						15	57	13	8.5	5.0	8.5	3.9
4						86	29	15	5.7	4.6	7.0	3.6
5						75	278	44	6.0	5.0	4.3	3.6
6						32	66	27	7.5	5.0	4.3	4.3
7			†9.1, 36, 85, 115			24	42	16	8.0	8.5	7.5	3.9
8						19	35	14	6.5	12	7.0	3.6
9						17	28	16	23	6.0	8.0	3.6
10						16	25	14	27	5.3	8.0	3.9
11						15	23	12	10	24	9.5	3.6
12						13	22	11	8.0	12	4.6	2.9
13						133	19	10	7.0	14	13	3.6
14						119	17	9.0	7.0	43	8.0	3.6
15						39	15	8.5	7.5	3.9	5.7	2.9
16						30	15	8.0	7.0	3.9	5.0	4.6
17						23	14	8.0	6.5	3.9	5.3	8.5
18						34	13	10	7.0	3.9	4.6	4.3
19						33	13	14	6.5	71	3.9	3.6
20						23	12	8.5	8.0	12	3.9	6.0
21						21	12	8.0	13	7.0	3.2	5.0
22						350	12	7.0	8.0	7.9	17	4.3
23						107	12	6.5	6.5	4.8	6.0	5.3
24						48	22	7.0	6.5	5.3	5.0	13
25					†82	36	32	7.5	35	9.0	4.6	40
26						29	44	13	26	84	3.9	12
27						24	43	8.0	7.0	6.5	3.9	10
28						23	23	5.7	6.5	6.0	3.9	8.5
29						21	21	5.3	13	6.0	3.9	6.5
30						19	16	5.7	6.5	6.5	3.9	6.0
31						17	---	5.7	---	6.5	3.6	---
TOTAL						1481	1019	367.4	312.7	406.0	194.5	192.8
MEAN						47.8	34.0	11.9	10.4	13.1	6.27	6.43
MAX						350	278	44	35	84	17	40
MIN						13	12	5.3	5.7	3.9	3.2	2.9
CFSM						3.62	2.58	.90	.79	.99	.48	.49
IN.						4.17	2.87	1.04	.88	1.14	.55	.54

† Result of discharge measurement.

01399690 SOUTH BRANCH ROCKAWAY CREEK AT WHITEHOUSE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	COD IN BOTTOM MATERIAL (MG/KG)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./ 100 ML)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)
DEC												
07...	1040	--	248	7.6	3.3	100	12.2	14	--	--	--	--
MAR												
13...	0750	15	268	7.6	10.5	7	10.6	12	--	1.4	B180	420
13...	0949	39	241	7.4	10.5	120	10.6	50	--	2.9	B2500	B2400
13...	1049	61	248	7.2	10.0	60	10.8	25	--	2.8	B2000	6600
13...	1310	227	201	7.3	11.0	180	10.2	52	--	3.7	B5500	B28000
13...	1526	383	202	7.4	11.0	75	11.0	33	--	2.5	B1600	B55000
13...	1745	258	170	7.0	11.5	150	10.3	45	--	4.5	6200	>20000
13...	2135	155	177	7.6	11.0	140	7.5	41	--	4.5	4600	>20000
APR												
19...	0920	13	247	8.8	15.5	6	11.7	10	8500	2.2	B100	B160
JUN												
06...	1150	6.5	313	7.5	19.5	10	6.8	11	--	2.0	100	3200
25...	1412	5.7	278	7.8	23.0	1	6.6	19	--	1.8	B20	B2200
25...	1717	9.5	271	7.7	22.0	8	6.6	21	--	5.3	720	8200
25...	1807	26	212	7.7	21.0	30	7.2	27	--	7.0	9200	10200
25...	1839	43	174	7.5	20.5	130	7.6	35	--	8.4	41000	49000
25...	1927	74	218	7.5	20.5	110	7.8	40	--	8.9	23000	64000
25...	2005	109	270	7.6	20.5	80	7.7	27	--	8.6	9000	32000
25...	2150	188	209	7.5	19.5	150	8.0	31	--	8.0	32000	B31000
26...	0016	95	174	7.3	20.0	190	8.3	40	--	7.8	49000	B1600000
26...	0230	56	182	7.2	19.0	200	7.8	40	--	7.5	51000	B1500000
26...	1035	19	252	7.9	21.0	70	7.9	22	--	5.0	--	7000
26...	1520	13	235	7.7	24.0	75	6.7	22	--	4.5	--	6000
JUL												
05...	1530	5.3	281	8.5	27.0	10	7.6	28	14000	>9.3	B160	B46000
11...	0630	4.6	288	7.8	23.5	5	5.3	10	--	2.6	360	2200
11...	0950	71	192	9.3	13.0	2	8.8	8	--	3.0	180	320
11...	1420	70	177	8.0	18.5	2	9.9	9	--	1.1	80	1100
14...	0750	5.7	275	8.1	25.0	1	5.6	20	--	2.3	700	11000
14...	1020	157	173	7.8	18.5	15	9.1	35	--	3.9	240	2300
14...	1410	157	167	7.7	18.0	1	9.5	25	--	1.6	76	260
19...	0755	6.1	290	7.9	26.0	1	4.5	51	--	2.1	420	4400
19...	0926	273	171	7.6	17.0	15	9.9	35	--	3.0	600	B1800
19...	1358	265	168	7.6	18.0	6	10.0	15	--	2.0	230	420
26...	0755	9.5	286	7.4	21.5	3	5.4	20	--	4.3	830	700
26...	1055	8.0	159	7.3	17.5	4	10.0	20	--	1.4	170	460
26...	1255	409	158	7.3	17.5	3	--	15	--	1.0	62	310

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	HYDROXIDE (OH) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)
DEC												
07...	94	29	24	8.3	10	1.9	79	0	--	65	3.2	--
MAR												
13...	100	44	26	10	12	1.9	68	0	--	56	2.7	--
13...	86	39	20	8.3	13	1.9	55	0	--	45	3.5	--
13...	87	42	21	8.5	15	2.0	55	0	--	45	5.6	--
13...	75	33	18	7.3	11	2.0	51	0	--	42	4.1	--
13...	73	34	17	7.4	10	2.0	48	0	--	39	3.1	--
13...	60	35	14	6.0	9.7	2.5	31	0	--	25	5.0	--
13...	25	--	4.5	3.4	9.4	2.2	--	--	--	--	--	--
APR												
19...	87	24	24	6.4	8.6	1.5	72	2	--	63	.2	.0
JUN												
06...	120	30	28	11	9.4	1.8	110	0	--	90	5.6	--
25...	120	--	28	11	10	2.1	--	--	--	--	--	--
25...	110	28	27	10	9.8	2.1	100	0	--	82	3.2	--
25...	80	21	20	7.2	8.0	1.9	72	0	--	59	2.3	--
25...	59	16	15	5.3	7.2	2.0	52	0	--	43	2.6	--
25...	76	16	15	7.0	9.4	2.3	73	0	--	60	3.7	--
25...	100	24	25	9.3	12	2.2	93	0	--	76	3.7	--
25...	77	17	19	7.1	7.6	2.2	73	0	--	60	3.7	--
26...	63	19	16	5.6	7.3	2.7	54	0	--	44	4.3	--
26...	63	19	16	5.7	9.0	3.0	54	0	--	44	5.5	--
26...	93	24	23	8.7	11	2.4	84	0	--	69	1.7	--
26...	85	23	21	7.8	9.2	2.6	76	0	--	62	2.4	--
JUL												
05...	110	26	29	10	10	2.4	100	1	--	84	.5	.0
11...	120	31	30	10	9.4	2.0	109	0	--	89	2.8	--
11...	47	7	12	4.2	7.4	13	0	24	4	40	.0	--
11...	64	20	16	5.8	5.8	2.0	54	0	--	44	.9	--
14...	110	28	28	10	9.7	2.1	100	0	--	82	1.3	--
14...	60	16	15	5.4	5.7	2.7	54	0	--	44	1.4	--
14...	63	19	16	5.7	5.5	1.6	54	0	--	44	1.7	--
19...	120	29	30	11	10	2.1	111	0	--	91	2.2	--
19...	57	14	14	5.3	6.0	2.4	52	0	--	43	2.1	--
19...	60	18	15	5.5	6.0	1.5	51	0	--	42	2.0	--
26...	120	23	30	11	9.8	2.1	118	0	--	97	7.5	--
26...	51	9	10	6.2	5.7	1.5	51	0	--	42	4.1	--
26...	60	16	15	5.5	5.8	1.5	54	0	--	44	4.3	--

01399690 SOUTH BRANCH ROCKAWAY CREEK AT WHITEHOUSE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE IN BOT. MAT. (MG/KG)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)	TOTAL AMMONIA NITROGEN IN BOTTOM MAT. (MG/KG)
DEC												
07...	27	15	--	--	--	137	498	.90	.01	--	.05	--
MAR												
13...	30	20	--	--	--	140	--	--	--	--	.04	--
13...	27	22	--	--	--	125	--	--	--	--	.06	--
13...	28	25	--	--	--	144	--	--	--	--	.08	--
13...	22	16	--	--	--	119	--	--	--	--	.08	--
13...	24	16	--	--	--	109	--	--	--	--	.07	--
13...	20	15	--	--	--	94	--	--	--	--	.09	--
13...	19	13	--	--	--	77	--	--	--	--	.00	--
APR												
19...	27	12	.1	.1	11	129	--	--	--	.0	.08	11
JUN												
06...	25	14	--	--	--	187	--	.65	.10	--	.34	--
25...	24	14	--	--	--	196	--	--	--	--	.03	--
25...	24	14	--	--	--	169	--	--	--	--	.03	--
25...	19	11	--	--	--	128	--	--	--	--	.10	--
25...	15	9.4	--	--	--	104	--	--	--	--	.03	--
25...	18	12	--	--	--	131	--	--	--	--	.01	--
25...	21	17	--	--	--	177	--	--	--	--	.13	--
25...	17	11	--	--	--	130	--	--	--	--	.11	--
26...	16	10	--	--	--	110	--	--	--	--	.13	--
26...	17	13	--	--	--	116	--	--	--	--	.04	--
26...	21	14	--	--	--	156	--	--	--	--	.00	--
26...	21	14	--	--	--	148	--	--	--	--	.08	--
JUL												
05...	23	14	.1	.1	15	175	24	.43	.02	4.3	.00	7.5
11...	25	15	--	--	--	165	--	.47	.03	--	.00	--
11...	20	8.6	--	--	--	110	--	.07	.01	--	.00	--
11...	20	8.2	--	--	--	94	--	.06	.00	--	.01	--
14...	22	14	--	--	--	166	--	.18	.01	--	.00	--
14...	18	7.7	--	--	--	91	--	.03	.00	--	.00	--
14...	18	7.7	--	--	--	90	--	.03	.01	--	.00	--
19...	22	15	--	--	--	177	--	.14	.01	--	.04	--
19...	15	8.1	--	--	--	98	--	.03	.00	--	.00	--
19...	15	8.1	--	--	--	99	--	--	--	--	--	--
26...	20	15	--	--	--	173	--	.03	.00	--	.01	--
26...	17	8.2	--	--	--	104	--	.29	.02	--	.16	--
26...	17	8.0	--	--	--	119	--	.03	.00	--	.01	--

DATE	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN IN BOTTOM MATERIAL (N) (MG/KG)	DISSOLVED PHOSPHORUS (P) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS IN BOTTOM MATERIAL (MG/KG)	TOTAL ORGANIC CARBON (C) (MG/L)	DISSOLVED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)	INORGANIC CARBON IN BOTTOM MATERIAL (G/KG)
DEC											
07...	.38	.43	--	--	.06	.05	--	6.0	5.7	--	--
MAR											
13...	.18	.22	--	--	.02	--	--	--	8.5	--	--
13...	.22	.28	--	--	.04	--	--	--	8.7	--	--
13...	.33	.41	--	--	.05	--	--	--	7.8	--	--
13...	.25	.33	--	--	.04	--	--	--	6.1	--	--
13...	.31	.38	--	--	.00	--	--	--	7.6	--	--
13...	.54	.63	--	--	.05	--	--	--	5.7	--	--
13...	.64	.64	--	--	.04	--	--	--	5.2	--	--
APR											
19...	.26	.26	1700	1700	.01	--	350	--	1.3	3.2	.1
JUN											
06...	.35	.69	--	--	.06	.03	--	--	4.2	--	--
25...	.37	.40	--	--	.07	--	--	--	3.5	--	--
25...	.43	.46	--	--	.06	--	--	--	3.2	--	--
25...	.42	.52	--	--	.10	--	--	--	3.1	--	--
25...	.45	.48	--	--	.10	--	--	--	4.3	--	--
25...	.45	.46	--	--	.10	--	--	--	4.0	--	--
25...	.42	.55	--	--	.07	--	--	--	3.8	--	--
25...	.33	.44	--	--	.07	--	--	--	3.6	--	--
26...	.33	.46	--	--	.08	--	--	--	4.0	--	--
26...	.70	.74	--	--	.11	--	--	--	4.2	--	--
26...	.37	.37	--	--	.06	--	--	--	4.1	--	--
26...	.26	.34	--	--	.05	--	--	--	3.7	--	--
JUL											
05...	.39	.39	1200	1200	.04	.00	140	5.8	2.4	3.8	.1
11...	.49	.49	--	--	.03	.00	--	--	3.6	--	--
11...	.11	.11	--	--	.00	.00	--	--	4.0	--	--
11...	.30	.31	--	--	.00	.00	--	--	4.1	--	--
14...	.27	.27	--	--	.02	.00	--	--	2.6	--	--
14...	.18	.18	--	--	.01	.01	--	--	3.5	--	--
14...	.20	.20	--	--	.00	.00	--	--	3.0	--	--
19...	.28	.32	--	--	.07	.02	--	--	3.5	--	--
19...	.35	.35	--	--	.01	.00	--	--	2.9	--	--
19...	--	--	--	--	--	--	--	--	3.2	--	--
26...	.21	.22	--	--	.00	.00	--	--	3.8	--	--
26...	.17	.33	--	--	.08	.05	--	--	4.0	--	--
26...	.30	.31	--	--	.00	.00	--	--	3.7	--	--

01399690 SOUTH BRANCH ROCKAWAY CREEK AT WHITEHOUSE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BARIUM (BA) (UG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)
APR 19...	0920	140	1	9	100	40	0	<10	7	10
JUL 05...	1530	80	2	8	100	90	0	<10	3	<10

DATE	DISSOLVED COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	DISSOLVED COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	DISSOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	DISSOLVED LITHIUM (LI) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)
APR 19...	0	<10	0	<10	60	3000	2	<10	0	70
JUL 05...	0	<10	0	<10	40	1500	0	20	0	100

DATE	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	DISSOLVED MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	DISSOLVED NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	DISSOLVED STRONTIUM (SR) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
APR 19...	610	.0	.1	2	<10	210	0	30	0	.0
JUL 05...	320	.0	.2	3	<10	210	20	20	0	.0

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
APR 19...	0	.0	.0	.0	.0	.0	.0	.0	.0	0
JUL 05...	0	.0	.0	.0	.0	.0	.0	.0	.0	0

01399690 SOUTH BRANCH ROCKAWAY CREEK AT WHITEHOUSE, NJ--Continued

PARTICLE SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM
FEB							
25...	1240	83	2.5	201	45	58	79
MAR							
04...	1405	76	--	136	28	42	60
13...	1000	44	10.5	323	38	50	65
13...	1245	186	11.0	711	357	39	56
13...	1540	388	11.0	151	158	46	71
13...	1905	185	11.5	175	183	65	83
JUN							
25...	2040	162	20.0	426	186	42	66
JUL							
19...	0853	268	--	265	190	25	40
19...	0948	273	17.5	113	83	26	42
19...	1356	285	18.0	140	103	17	35
26...	0909	416	--	251	268	11	32

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
FEB							
25...	90	95	99	100	--	--	--
MAR							
04...	75	86	94	98	100	--	--
13...	81	90	97	100	--	--	--
13...	75	85	97	98	100	--	--
13...	84	88	92	95	97	100	--
13...	90	93	96	98	99	100	--
JUN							
25...	81	85	97	99	100	--	--
JUL							
19...	57	72	88	96	99	100	--
19...	56	70	84	94	98	99	100
19...	58	76	88	95	98	100	--
26...	55	74	91	98	100	--	--

01399690 SOUTH BRANCH ROCKAWAY CREEK AT WHITEHOUSE, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1										---	---	---
2										---	---	---
3										---	---	---
4										---	---	---
5										242	208	220
6										238	213	219
7										241	224	231
8										247	227	236
9										246	232	239
10										251	238	243
11										251	242	245
12										252	242	---
13										---	---	---
14										---	---	---
15										---	---	---
16										---	---	---
17										266	257	263
18										286	246	267
19										284	268	277
20										294	276	269
21										286	276	---
22										283	272	---
23										294	278	---
24										283	273	278
25										288	278	282
26										---	---	---
27										---	---	---
28										---	---	---
29										---	---	---
30										---	---	---
31										---	---	---
MONTH										---	---	---

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	289	195	245	277	275	276
2	---	---	---	---	---	---	282	235	263	279	273	276
3	---	---	---	---	---	---	282	196	268	283	272	277
4	---	---	---	---	---	---	278	271	274	280	274	276
5	---	---	---	---	---	---	274	263	270	285	274	280
6	---	---	---	271	251	---	273	242	268	297	286	291
7	---	---	---	275	258	270	278	256	273	290	281	286
8	---	---	---	277	259	271	278	228	271	290	282	285
9	279	256	---	273	264	269	268	240	260	284	282	283
10	267	248	254	---	---	---	267	159	255	285	281	283
11	261	249	254	---	---	---	261	233	255	289	283	286
12	259	252	256	---	---	---	256	251	253	294	278	288
13	267	257	262	---	---	---	275	176	253	290	284	288
14	272	260	266	---	---	---	263	251	258	291	288	289
15	271	265	268	---	---	---	261	258	259	291	288	290
16	278	267	273	---	---	---	263	245	256	292	265	287
17	280	272	277	---	---	---	252	248	251	285	268	280
18	284	275	278	---	---	---	256	252	255	286	274	283
19	287	278	280	---	---	---	260	255	258	287	275	284
20	288	234	281	---	---	---	262	256	258	288	266	281
21	284	275	279	---	---	---	264	260	261	286	276	284
22	277	271	275	279	155	---	268	186	246	285	273	283
23	277	274	275	279	271	275	256	239	250	289	242	280
24	277	273	275	281	276	279	249	239	244	290	254	283
25	281	162	257	284	195	264	257	249	252	292	230	265
26	242	166	210	281	154	240	258	254	257	270	251	260
27	---	---	---	286	279	282	261	259	260	272	258	265
28	---	---	---	287	283	285	266	256	262	285	269	275
29	---	---	---	287	281	286	268	264	267	288	278	283
30	---	---	---	287	277	285	272	267	270	288	274	286
31	---	---	---	288	282	286	278	271	275	---	---	---
MONTH	---	---	---	---	---	---	289	159	260	297	230	281
YEAR	297	154	268									

01399690 SOUTH BRANCH ROCKAWAY CREEK AT WHITEHOUSE, NJ--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1										---	---	---
2										---	---	---
3										---	---	---
4										---	---	---
5										16.0	12.5	14.0
6										21.0	15.0	17.5
7										20.5	17.0	19.0
8										20.0	14.5	17.0
9										16.5	12.0	14.0
10										13.0	11.0	12.0
11										15.5	11.0	13.0
12										---	---	---
13										---	---	---
14										---	---	---
15										---	---	---
16										21.5	19.0	---
17										22.5	17.5	20.5
18										25.0	20.0	22.5
19										22.5	20.5	21.5
20										24.5	19.5	21.0
21										24.5	21.5	---
22										25.5	21.0	---
23										25.5	22.0	---
24										26.5	22.5	24.0
25										25.0	22.5	23.5
26										---	---	---
27										---	---	---
28										---	---	---
29										---	---	---
30										---	---	---
31										---	---	---
MONTH										---	---	---

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	25.5	20.5	22.5	25.5	23.0	24.0
2	---	---	---	---	---	---	26.5	21.0	23.5	27.5	23.5	25.5
3	---	---	---	---	---	---	24.5	22.0	22.5	27.5	25.0	26.0
4	---	---	---	---	---	---	26.5	22.0	24.0	25.5	22.5	24.0
5	---	---	---	---	---	---	27.0	23.5	25.0	24.5	22.5	23.5
6	---	---	---	27.5	25.5	---	28.5	25.0	26.5	25.0	22.5	24.0
7	---	---	---	25.5	24.0	24.5	28.0	25.0	26.5	24.0	22.0	23.0
8	---	---	---	28.0	22.5	25.0	28.5	25.5	27.0	22.5	20.5	21.5
9	17.5	16.0	---	28.0	24.5	26.5	29.0	26.0	27.0	23.5	19.0	21.0
10	17.0	16.0	16.5	26.0	24.0	---	27.5	24.5	25.5	24.0	21.0	22.0
11	18.5	15.5	17.0	---	---	---	29.0	25.0	26.5	22.0	19.0	21.0
12	22.5	17.0	19.5	---	---	---	27.5	26.0	26.5	21.0	16.5	19.0
13	25.0	20.5	22.5	---	---	---	26.0	23.0	24.5	20.5	18.0	19.5
14	23.5	21.5	22.5	---	---	---	24.5	23.5	24.0	21.0	19.0	20.0
15	25.0	22.0	23.0	---	---	---	26.0	23.0	24.5	20.0	17.0	18.5
16	25.5	22.0	23.5	---	---	---	26.0	22.5	23.5	18.5	18.0	18.0
17	24.5	21.5	23.0	---	---	---	25.0	23.5	24.0	22.0	18.5	20.0
18	26.5	22.0	24.5	---	---	---	24.0	22.0	23.0	23.0	20.0	21.5
19	28.0	24.0	25.5	---	---	---	23.5	19.5	22.0	24.0	21.5	22.5
20	26.5	23.0	24.5	---	---	---	23.5	21.0	22.0	23.5	21.0	22.5
21	24.5	22.5	23.5	---	---	---	23.0	18.0	20.5	21.0	19.0	20.0
22	25.0	21.0	23.0	28.0	18.5	---	24.0	20.0	22.0	19.0	17.5	18.0
23	26.5	20.0	23.5	27.5	22.0	24.5	23.5	20.0	21.5	18.0	17.5	17.5
24	25.0	21.5	23.5	27.5	23.0	25.0	22.0	19.5	21.0	17.5	16.5	17.5
25	23.5	20.0	22.0	25.0	20.5	24.5	22.5	18.5	20.5	16.5	15.0	15.5
26	23.5	20.0	21.0	24.0	16.0	21.0	22.5	17.5	20.0	16.5	15.0	15.5
27	---	---	---	24.5	20.0	22.5	23.0	19.5	21.5	17.5	16.0	16.5
28	---	---	---	24.5	20.5	22.0	26.0	21.0	23.0	18.5	15.5	17.0
29	---	---	---	25.0	20.5	22.5	26.5	23.0	24.5	17.5	15.5	16.5
30	---	---	---	25.5	22.0	23.5	27.5	24.0	25.5	18.5	16.0	17.0
31	---	---	---	27.5	22.5	25.0	26.0	23.0	24.5	---	---	---
MONTH	---	---	---	---	---	---	29.0	17.5	23.5	27.5	15.0	20.5
YEAR	29.0	11.0	22.0									

01399695 ROCKAWAY CREEK AT MILL ROAD AT WHITEHOUSE, NJ

LOCATION.--Lat 40°37'31", long 74°45'25", Hunterdon County, Hydrologic Unit 02030105, on right bank at bridge on Mill Road, 0.4 mi (0.6 km) north of Whitehouse, 0.4 mi (0.6 km) downstream from South Branch Rockaway Creek, and 2.5 mi (4.0 km) southeast of Potterstown.

DRAINAGE AREA.--35.6 mi² (92.2 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: December 1976 to September 1977.
CHEMICAL ANALYSES: December 1976 to July 1977.
SEDIMENT ANALYSES: December 1976 to July 1977.

REMARKS.--Site is sampled as part of a project to study the effects of supplemental releases from Round Valley Reservoir to the South Branch Rockaway Creek.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	COD IN BOTTOM MA-TERIAL (MG/KG)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM .7UM-MF (COL./ 100 ML)	FECAL STREP-TOCOCCI KF AGAR (COL. PER 100 ML)	HARD-NESS (CA,MG) (MG/L)
DEC 07...	1140	197	7.5	2.0	100	12.4	16	--	--	--	--	69
MAR 13...	1220	169	7.9	10.0	120	10.4	33	--	4.0	81700	820000	56
APR 19...	1200	175	8.9	16.0	2	13.0	7	5200	1.6	<20	8100	50
JUN 25...	1045	155	7.6	20.0	2	8.5	15	--	7.0	35000	52000	61
JUL 05...	1330	229	8.4	24.5	1	10.0	7	2600	2.6	81500	4600	89

DATE	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOL-VED SUL-FIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
DEC 07...	21	18	5.9	9.4	1.9	59	0	48	3.0	--	21
MAR 13...	25	14	5.0	9.6	1.8	38	0	31	.8	--	21
APR 19...	7	16	2.3	6.5	1.3	46	3	43	.1	.0	20
JUN 25...	17	15	5.7	7.1	1.6	54	0	44	2.2	--	14
JUL 05...	23	22	8.3	8.0	1.8	80	0	66	.5	.0	17

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE IN BOT. MAT. (MG/KG)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	TOTAL AMMONIA NITRO-GEN IN BOTTOM MAT. (MG/KG)
DEC 07...	13	--	--	--	109	420	1.3	.01	--	.03	--
MAR 13...	16	--	--	--	108	--	--	--	--	.05	--
APR 19...	7.7	.1	.0	12	97	--	--	--	.0	.01	4.4
JUN 25...	7.2	--	--	--	103	--	--	--	--	.00	--
JUL 05...	9.3	.1	.1	15	164	5	1.2	.01	3.0	.01	4.6

DATE	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L)	TOTAL KJEL. NITRO-GEN IN BOTTOM MAT. (MG/KG)	TOTAL NITRO-GEN IN BOTTOM MATERI-AL (N) (MG/KG)	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS IN BOT-TOM MA-TERIAL (MG/KG)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOL-VED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOT-TOM MA-TERIAL (C) (G/KG)	IN-ORGANIC CARBON IN BOT-TOM MA-TERIAL (G/KG)
DEC 07...	.50	.53	--	--	.10	.08	--	6.4	3.0	--	--
MAR 13...	.30	.35	--	--	.04	--	--	7.4	--	--	--
APR 19...	.35	.36	780	780	.01	--	110	--	1.2	1.4	.0
JUN 25...	.64	.64	--	--	.19	--	--	--	6.1	--	--
JUL 05...	.28	.29	420	420	.04	.01	170	6.1	3.0	1.5	.0

01399695 ROCKAWAY CREEK AT MILL ROAD AT WHITEHOUSE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BARIUM (BA) (UG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)
APR 19...	1200	140	1	6	100	20	0	<10	18	<10
JUL 05...	1330	80	2	2	0	60	0	<10	2	<10

DATE	DISSOLVED COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	DISSOLVED COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	DISSOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	DISSOLVED LITHIUM (LI) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)
APR 19...	0	<10	0	<10	80	1800	12	<10	0	20
JUL 05...	0	<10	0	<10	50	850	2	<10	0	40

DATE	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	DISSOLVED MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	DISSOLVED NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	DISSOLVED STRONTIUM (SR) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
APR 19...	150	.0	.0	4	<10	170	0	20	0	.0
JUL 05...	210	.0	.1	2	<10	170	0	10	8	.0

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
APR 19...	0	.0	.0	.0	.0	.0	.0	.0	.0	0
JUL 05...	0	.0	.0	.0	.0	.0	.0	.0	.0	0

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
DEC 07...	1140	F111	--	433	--
FEB 27...	1300	81	6.5	13	2.8
APR 19...	1225	49	16.0	4	.53
JUN 22...	1230	17	20.5	7	.32
25...	1845	187	20.0	3130	1580
JUL 02...	1010	17	21.0	9	.41
05...	1330	12	24.5	62	2.0
SEP 08...	1125	7.0	19.5	10	.19

01399700 ROCKAWAY CREEK AT WHITEHOUSE, NJ

LOCATION.--Lat 40°37'49", long 74°44'11", Hunterdon County, Hydrologic Unit 02030105, on right bank at bridge on Lamington Road, 1.4 mi (2.3 km) northeast of Whitehouse, and 1.8 mi (2.9 km) upstream from mouth.

DRAINAGE AREA.--37.1 mi² (96.1 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1959-62, 1964-65, 1973, April to September 1977.
CHEMICAL ANALYSES: Water years 1959-62, 1964-65, 1976 to current year.
SEDIMENT ANALYSES: October 1976 to September 1977.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: April to September 1977.
SPECIFIC CONDUCTANCE: April to September 1977.
WATER TEMPERATURES: April to September 1977.
SEDIMENT ANALYSES: October 1976 to September 1977.

GAGE.--Water-stage recorder. Datum of gage is 99.64 ft (30.37 m) NGVD.

REMARKS.--Discharge records good. Flow regulated by Round Valley Reservoir. Site is sampled as part of a project to study the effect of supplemental releases from Round Valley Reservoir to the South Branch Rockaway Creek.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Selected analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period April 14 to September 30, 470 ft³/s (13.3 m³/s) Apr. 26, gage height, 3.56 ft (1.085 m); minimum, 7.6 ft³/s (0.22 m³/s) Sept. 12, gage height, 1.34 ft (0.408 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 1,240 ft³/s (35.1 m³/s) Mar. 13, 1977, gage height, 5.34 ft (1.628 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								50	32	19	15	12
2								50	31	18	16	11
3								48	27	15	20	10
4						†246		46	20	15	25	9.7
5								162	20	15	13	9.7
6			†56				†197,168	133	23	15	13	10
7								63	25	20	16	9.7
8								51	24	28	21	9.0
9								64	56	18	27	9.3
10								57	73	15	19	9.3
11								72	31	31	33	8.7
12						†44		43	24	24	15	7.6
13						†86,1200		48	23	32	28	8.4
14							64	37	21	59	24	9.0
15							60	35	23	10	16	8.1
16							55	33	20	13	14	11
17							50	32	19	13	14	25
18							34	42	20	13	13	13
19							50	72	20	44	12	11
20							48	37	20	21	11	16
21							46	32	32	14	11	15
22							45	30	20	13	35	13
23							45	28	17	11	18	15
24							69	28	16	11	14	38
25					†271		122	28	52	13	14	106
26							150	32	104	55	12	27
27							162	26	28	11	12	23
28							78	23	23	10	12	20
29							70	21	33	10	11	16
30							55	23	21	10	11	14
31							---	23	---	11	11	---
TOTAL	---	---	---	---	---	---	---	1461	898	607	526	504.5
MEAN	---	---	---	---	---	---	---	47.1	29.9	19.6	17.0	16.8
MAX	---	---	---	---	---	---	---	162	104	59	35	106
MIN	---	---	---	---	---	---	---	21	16	10	11	7.6
CFSM	---	---	---	---	---	---	---	1.27	.81	.53	.46	.45
IN.	---	---	---	---	---	---	---	1.46	.90	.61	.53	.51

† Result of discharge measurement.

01399700 ROCKAWAY CREEK AT WHITEHOUSE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	COD IN BOTTOM MATERIAL (MG/KG)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL COLIFORM .7UM-MF (COL./100 ML)
OCT												
12...	1000	--	224	7.6	9.0	10	11.4	--	--	1.0	490	--
NOV												
15...	1330	--	226	8.5	4.0	3	13.0	--	--	--	170	--
FEB												
15...	1330	--	186	6.8	.0	10	14.8	--	--	--	260	--
MAR												
13...	0758	53	182	7.8	10.0	3	7.7	12	--	2.1	--	B200
13...	1018	98	169	7.7	10.0	30	10.7	13	--	2.4	--	540
13...	1120	185	178	7.5	10.0	60	8.0	27	--	3.3	--	1200
13...	1335	925	145	7.6	10.5	170	--	53	--	3.4	--	B3200
13...	1550	1210	137	7.5	11.0	140	8.8	47	--	3.8	--	5600
13...	1704	1040	129	--	10.5	90	8.8	43	--	3.5	--	B3400
13...	2015	600	127	7.8	11.5	85	10.0	43	--	3.8	--	5000
14...	1245	--	138	7.1	9.5	65	11.1	--	--	--	3500	--
APR												
18...	1045	45	173	8.9	13.5	3	11.5	--	--	--	20	--
19...	1410	51	173	9.3	18.5	2	15.6	11	4500	1.9	--	<20
MAY												
09...	1445	66	169	8.4	12.0	3	10.5	--	--	--	110	--
JUN												
06...	1130	20	211	7.9	17.0	6	4.6	9	--	1.6	--	900
06...	1500	27	208	7.9	16.5	5	6.0	10	--	1.9	--	B1300
13...	1200	23	195	--	18.0	5	9.9	--	--	--	230	--
25...	1316	17	214	8.4	20.0	3	10.8	7	--	1.8	--	1000
25...	1811	36	188	7.9	19.5	150	8.7	50	--	3.6	--	88
25...	1853	50	183	7.9	19.5	170	9.2	31	--	3.6	--	12000
25...	1921	80	170	7.9	19.5	180	8.6	55	--	6.6	--	34000
25...	1955	137	126	7.6	18.5	180	8.6	45	--	4.7	--	33000
25...	2108	191	125	7.7	19.5	160	7.8	45	--	5.4	--	39000
26...	0001	235	129	7.4	19.0	150	7.8	55	--	7.5	--	54000
26...	0143	254	131	7.9	19.0	20	8.0	50	--	6.4	--	44000
26...	0303	225	138	7.6	19.0	20	7.8	45	--	5.9	--	42000
26...	1207	70	155	7.6	20.7	10	8.3	35	--	3.3	--	--
JUL												
05...	1120	15	231	8.5	24.0	2	11.2	8	4800	3.1	--	760
11...	0640	15	195	8.3	21.2	1	13.4	10	--	1.4	--	1200
11...	1000	72	225	7.9	20.5	1	8.4	20	--	2.7	--	3200
11...	1535	67	185	7.6	17.5	2	10.5	10	--	1.7	--	B17000
14...	0750	17	221	7.7	22.5	1	7.4	15	--	2.0	--	2000
14...	1115	179	173	7.6	20.0	2	9.2	20	--	1.4	--	1200
14...	1430	181	168	7.7	19.5	1	9.4	10	--	1.1	--	670
19...	0752	12	240	7.4	24.0	1	7.6	5	--	1.1	--	1200
19...	1038	292	171	7.6	18.0	3	9.6	15	--	1.3	--	B1800
19...	1425	292	167	7.6	19.0	2	9.6	15	--	1.3	--	560
21...	1230	--	223	8.2	25.0	1	9.6	--	--	--	2400	--
26...	0800	18	240	7.7	19.5	2	8.6	15	--	2.1	--	2000

01399700 ROCKAWAY CREEK AT WHITEHOUSE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	FECAL STREP-TOCOCCI (MPN)	FECAL STREP-TOCOCCI KF AGAR (COL. PER 100 ML)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
OCT											
12...	240	--	80	--	20	7.2	7.8	2.1	--	--	--
NOV											
15...	540	--	86	--	21	8.2	7.9	1.4	--	--	--
FEB											
15...	540	--	59	--	15	5.3	11	2.8	--	--	--
MAR											
13...	--	480	73	37	17	7.3	7.9	1.5	44	0	36
13...	--	B2600	60	22	15	5.5	7.5	1.5	46	0	38
13...	--	9200	58	26	15	5.1	10	1.6	39	0	32
13...	--	16000	45	19	11	4.3	8.1	1.9	32	0	26
13...	--	B47000	47	23	12	4.1	12	1.9	29	0	24
13...	--	B59000	45	--	11	4.2	6.8	2.0	--	--	--
13...	--	B130000	34	--	6.1	4.6	9.8	2.4	--	--	--
14...	>2400	--	48	--	12	4.3	7.5	2.1	--	--	--
APR											
18...	11	--	75	--	19	6.0	7.2	1.3	--	--	--
19...	--	B140	67	23	16	6.6	6.6	1.4	44	5	44
MAY											
09...	33	--	67	--	17	6.0	7.4	1.5	--	--	--
JUN											
06...	--	2600	85	29	21	8.0	7.3	1.6	68	0	56
06...	--	B2100	82	26	20	7.7	7.1	1.6	68	0	56
13...	49	--	78	--	19	7.3	8.1	1.8	--	--	--
25...	--	840	86	24	21	8.2	7.8	1.7	74	1	62
25...	--	25000	75	19	18	7.2	7.5	2.3	68	0	56
25...	--	14000	70	12	17	6.6	6.6	1.7	71	0	58
25...	--	63000	65	7	16	6.1	11	1.7	71	0	58
25...	--	71000	48	14	12	4.3	7.0	1.8	41	0	34
25...	--	96000	43	13	11	3.7	5.4	2.2	37	0	30
26...	--	B170000	44	14	11	4.0	5.4	2.4	37	0	30
26...	--	B90000	46	16	12	4.0	5.6	2.6	37	0	30
26...	--	B1100000	44	15	11	4.1	6.6	2.6	35	0	29
26...	--	26000	56	21	14	5.2	6.7	2.2	43	0	35
JUL											
05...	--	840	87	21	21	8.3	7.8	1.8	79	1	66
11...	--	2700	85	15	21	8.0	7.3	1.7	85	0	70
11...	--	1500	76	8	19	7.0	8.1	4.8	116	0	95
11...	--	970	66	9	17	5.6	6.3	4.8	70	0	57
14...	--	1200	84	20	21	7.7	7.6	1.8	78	0	64
14...	--	2400	61	17	15	5.6	5.7	2.4	54	0	44
14...	--	2300	63	21	16	5.7	5.6	1.6	51	0	42
19...	--	1800	93	15	23	8.7	8.1	1.8	95	0	78
19...	--	4300	61	15	15	5.6	6.0	2.3	56	0	46
19...	--	1300	61	17	15	5.7	6.0	1.5	54	0	44
21...	240	--	87	--	21	8.5	8.9	2.0	--	--	--
26...	--	4200	97	21	24	9.0	8.9	1.8	93	0	76

01399700 ROCKAWAY CREEK AT WHITEHOUSE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOL-VED SUL-FIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)
OCT											
12...	--	.2	24	12	--	--	17	133	12	--	--
NOV											
15...	--	--	25	9.6	--	--	--	170	4	--	--
FEB											
15...	--	--	23	19	--	--	--	124	17	--	--
MAR											
13...	1.1	--	22	10	--	--	--	100	--	--	--
13...	1.5	--	22	9.8	--	--	--	100	--	--	--
13...	2.0	--	21	16	--	--	--	119	--	--	--
13...	1.3	--	19	16	--	--	--	91	--	--	--
13...	1.5	--	18	11	--	--	--	81	--	--	--
13...	--	--	18	11	--	--	--	84	--	--	--
13...	--	--	22	17	--	--	--	121	--	--	--
14...	--	--	19	9.3	--	--	--	77	86	--	--
APR											
18...	--	--	18	7.8	--	--	--	87	5	--	--
19...	.0	.0	20	7.7	.1	.0	12	95	--	--	--
MAY											
09...	--	--	21	8.5	--	--	--	105	3	--	--
JUN											
06...	1.4	--	20	8.8	--	--	--	144	--	--	1.4
06...	1.4	--	20	8.5	--	--	--	133	--	--	1.3
13...	--	--	20	9.1	--	--	--	131	0	--	--
25...	.5	--	19	9.3	--	--	--	137	--	--	--
25...	1.4	--	18	8.2	--	--	--	118	--	--	--
25...	1.4	--	17	7.8	--	--	--	112	--	--	--
25...	1.4	--	16	9.3	--	--	--	125	--	--	--
25...	1.6	--	11	5.4	--	--	--	79	--	--	--
25...	1.2	--	12	6.8	--	--	--	73	--	--	--
26...	2.4	--	13	7.0	--	--	--	88	--	--	--
26...	.7	--	14	7.6	--	--	--	95	--	--	--
26...	1.4	--	14	9.1	--	--	--	105	--	--	--
26...	1.7	--	16	8.0	--	--	--	143	--	--	--
JUL											
05...	.4	.0	19	8.9	.1	.1	14	151	5	--	1.1
11...	.7	--	17	8.8	--	--	--	136	--	--	1.1
11...	2.3	--	19	9.8	--	--	--	126	--	--	.55
11...	2.8	--	18	7.8	--	--	--	100	--	--	.24
14...	2.5	--	18	9.1	--	--	--	126	--	--	.87
14...	2.2	--	18	7.7	--	--	--	90	--	--	.10
14...	1.6	--	17	7.5	--	--	--	93	--	--	.10
19...	6.1	--	19	9.8	--	--	--	142	--	--	.94
19...	2.3	--	18	8.0	--	--	--	76	--	--	.07
19...	2.2	--	18	7.9	--	--	--	79	--	--	.06
21...	--	--	19	9.4	--	--	--	138	5	.87	--
26...	3.0	--	19	11	--	--	--	151	--	--	.86

01399700 ROCKAWAY CREEK AT WHITEHOUSE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE IN BOT. MAT. (MG/KG)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	TOTAL AMMONIA NITRO-GEN IN BOTTOM MAT. (MG/KG)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L)	TOTAL KJEL. NITRO-GEN IN BOTTOM MAT. (MG/KG)
OCT											
12...	--	--	--	--	--	--	--	--	1.3	--	250
NOV											
15...	--	--	--	--	--	--	--	--	1.3	--	--
FEB											
15...	--	--	--	--	--	--	--	--	2.0	--	--
MAR											
13...	--	--	--	--	.00	--	--	.28	--	.28	--
13...	--	--	--	--	.00	--	--	.34	--	.34	--
13...	--	--	--	--	.02	--	--	.18	--	.20	--
13...	--	--	--	--	.01	--	--	.60	--	.61	--
13...	--	--	--	--	.04	--	--	.61	--	.65	--
13...	--	--	--	--	.03	--	--	.31	--	.34	--
13...	--	--	--	--	.00	--	--	.65	--	.65	--
14...	--	--	--	--	--	--	--	--	1.4	--	--
APR											
18...	--	--	--	--	--	--	--	--	1.1	--	--
19...	--	--	.0	--	.01	4.7	--	.30	--	.31	560
MAY											
09...	--	--	--	--	--	--	--	--	1.1	--	--
JUN											
06...	--	.02	--	--	.01	--	--	.34	--	.35	--
06...	--	.06	--	--	.00	--	--	.36	--	.36	--
13...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	.01	--	--	.22	--	.23	--
25...	--	--	--	--	.10	--	--	.28	--	.38	--
25...	--	--	--	--	.06	--	--	.09	--	.15	--
25...	--	--	--	--	.00	--	--	.41	--	.41	--
25...	--	--	--	--	.43	--	--	.00	--	.39	--
25...	--	--	--	--	.13	--	--	.36	--	.49	--
26...	--	--	--	--	.10	--	--	.40	--	.50	--
26...	--	--	--	--	.11	--	--	.45	--	.56	--
26...	--	--	--	--	.06	--	--	.77	--	.83	--
26...	--	--	--	--	.05	--	--	.38	--	.43	--
JUL											
05...	--	.01	4.1	--	.00	6.1	--	.54	--	.54	610
11...	--	.01	--	--	.02	--	--	.20	--	.22	--
11...	--	.01	--	--	.01	--	--	.25	--	.26	--
11...	--	.01	--	--	.00	--	--	.18	--	.18	--
14...	--	.01	--	--	.00	--	--	.26	--	.26	--
14...	--	.01	--	--	.00	--	--	.20	--	.20	--
14...	--	.01	--	--	.00	--	--	.17	--	.17	--
19...	--	.01	--	--	.02	--	--	.12	--	.14	--
19...	--	.01	--	--	.00	--	--	.15	--	.15	--
19...	--	.00	--	--	.00	--	--	.11	--	.11	--
21...	.01	--	--	.05	--	--	.29	--	.34	--	--
26...	--	.02	--	--	.01	--	--	.51	--	.52	--

01399700 ROCKAWAY CREEK AT WHITEHOUSE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN IN BOTTOM MATERI-AL (N) (MG/KG)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOL-VED PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS IN BOT-TOM MA-TERIAL (MG/KG)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOL-VED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOT-TOM MA-TERIAL (C) (G/KG)	IN-ORGANIC CARBON IN BOT-TOM MA-TERIAL (G/KG)
OCT											
12...	--	--	--	--	--	--	--	4.2	--	4.1	--
NOV											
15...	--	--	--	--	--	--	--	1.4	--	--	--
FEB											
15...	--	--	.22	--	--	--	--	7.0	--	--	--
MAR											
13...	--	--	--	.02	--	--	--	--	5.3	--	--
13...	--	--	--	.03	--	--	--	--	7.2	--	--
13...	--	--	--	.10	--	--	--	--	7.9	--	--
13...	--	--	--	.01	--	--	--	--	6.5	--	--
13...	--	--	--	.03	--	--	--	--	6.4	--	--
13...	--	--	--	.04	--	--	--	--	5.1	--	--
13...	--	--	--	.05	--	--	--	--	4.7	--	--
14...	--	--	.39	--	--	--	--	9.2	--	--	--
APR											
18...	--	--	.04	--	--	--	--	7.1	--	--	--
19...	--	560	--	.02	--	--	330	--	1.4	1.4	.0
MAY											
09...	--	--	.06	--	--	--	--	6.3	--	--	--
JUN											
06...	--	--	--	.04	--	.00	--	--	2.8	--	--
06...	--	--	--	.05	--	.00	--	--	4.3	--	--
13...	--	--	--	--	--	--	--	5.4	--	--	--
25...	--	--	--	.04	--	--	--	--	4.0	--	--
25...	--	--	--	.05	--	--	--	--	2.9	--	--
25...	--	--	--	.05	--	--	--	--	3.1	--	--
25...	--	--	--	.06	--	--	--	--	3.5	--	--
25...	--	--	--	.08	--	--	--	--	3.9	--	--
25...	--	--	--	.06	--	--	--	--	4.0	--	--
26...	--	--	--	.11	--	--	--	--	5.1	--	--
26...	--	--	--	.11	--	--	--	--	4.0	--	--
26...	--	--	--	.09	--	--	--	--	2.8	--	--
26...	--	--	--	.07	--	--	--	--	3.1	--	--
JUL											
05...	--	610	--	.03	--	.00	140	5.6	2.3	1.1	.0
11...	--	--	--	.03	--	.03	--	--	3.0	--	--
11...	--	--	--	.03	--	.02	--	--	4.1	--	--
11...	--	--	--	.01	--	.01	--	--	3.6	--	--
14...	--	--	--	.01	--	.01	--	--	3.1	--	--
14...	--	--	--	.01	--	.00	--	--	4.0	--	--
14...	--	--	--	.01	--	.00	--	--	4.1	--	--
19...	--	--	--	.05	--	.00	--	--	3.2	--	--
19...	--	--	--	.01	--	.00	--	--	3.1	--	--
19...	--	--	--	.00	--	.00	--	--	2.9	--	--
21...	1.2	--	.05	--	.03	--	--	4.9	--	--	--
26...	--	--	--	.04	--	.00	--	--	4.2	--	--

01399700 ROCKAWAY CREEK AT WHITEHOUSE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL COLIFORM .7UM-MF (COL./100 ML)
JUL											
26...	1025	421	161	7.7	18.5	8	9.0	25	1.5	--	8700
26...	1315	436	181	7.6	18.5	4	9.0	20	1.2	--	8400
AUG											
09...	1405	31	185	7.5	23.0	1	10.5	--	1.0	50	--

DATE	FECAL STREPTOCOCCI (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUL											
26...	--	2800	60	16	15	5.5	5.8	1.8	54	0	44
26...	--	910	60	18	15	5.5	5.8	1.5	51	0	42
AUG											
09...	1600	--	74	--	18	7.0	8.2	2.0	--	--	--

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)
JUL											
26...	1.7	17	8.0	95	--	--	.05	--	.00	--	.01
26...	2.0	18	8.1	109	--	--	.05	--	.00	--	.01
AUG											
09...	--	18	8.7	121	7	.90	--	.01	--	.01	--

DATE	TOTAL ORGANIC NITROGEN (N) (MG/L)	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DISSOLVED ORGANIC CARBON (C) (MG/L)
JUL											
26...	--	.27	--	.28	--	--	.01	--	.00	--	--
26...	--	.15	--	.16	--	--	.00	--	.00	--	4.1
AUG											
09...	.50	--	.51	--	1.4	.07	--	.02	--	4.5	--

01399700 ROCKAWAY CREEK AT WHITEHOUSE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BARIUM (BA) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)
OCT 12...	1000	170	160	10	0	--	3	--	60	1	--
APR 19...	1410	--	--	150	--	1	4	0	20	--	0
JUL 05...	1120	--	--	70	--	2	3	100	70	--	0

DATE	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)
OCT 12...	0	--	19	0	0	--	10	0	--	10	340
APR 19...	<10	7	<10	--	--	0	<10	--	0	<10	--
JUL 05...	<10	1	<10	--	--	0	<10	--	0	<10	--

DATE	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	DISSOLVED LITHIUM (LI) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)
OCT 12...	120	7700	2	--	7	--	70	--	60	<.5	--
APR 19...	60	2100	--	6	<10	0	--	20	320	--	.0
JUL 05...	40	500	--	0	<10	0	--	20	220	--	.0

DATE	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	DISSOLVED NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	DISSOLVED STRONTIUM (SR) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT 12...	.0	0	--	0	0	--	0	--	28	0	.0
APR 19...	.0	--	0	<10	--	190	--	0	40	5	.0
JUL 05...	.0	--	0	<10	--	150	--	10	10	0	.0

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT 12...	0	.0	.0	.0	.0	.0	.0	.0	.0	0
APR 19...	0	.0	.0	.0	.0	.0	.0	.0	.0	0
JUL 05...	0	.0	.0	.0	.0	.0	.0	.0	.0	0

01399700 ROCKAWAY CREEK AT WHITEHOUSE, NJ--Continued

PARTICLE SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM
MAR								
04...	1425	555	4.0	327	490	32	48	64
13...	1030	101	--	132	36	54	70	81
13...	1215	701	--	776	1470	42	57	75
13...	1500	1200	--	469	1520	33	49	65
13...	2000	511	11.5	190	262	44	58	74
JUN								
25...	2100	188	19.5	2050	1040	44	64	81
JUL								
14...	1025	177	19.5	138	66	35	58	70
19...	1020	295	18.5	202	161	35	55	70
26...	1040	411	19.0	220	244	26	40	64

DATE	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM	SUS. SED. SIEVE DIAM. % FINER THAN 2.00 MM
MAR							
04...	79	93	98	100	--	--	--
13...	88	93	94	95	96	100	--
13...	87	95	97	99	100	--	--
13...	79	93	96	98	98	99	100
13...	85	92	96	98	99	100	--
JUN							
25...	93	99	100	--	--	--	--
JUL							
14...	82	89	94	97	98	100	--
19...	82	95	99	100	--	--	--
26...	78	90	95	95	95	95	95

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1							---	---	---	177	168	171
2							---	---	---	182	174	177
3							---	---	---	180	175	178
4							---	---	---	180	173	176
5							---	---	---	176	131	158
6							---	---	---	157	109	140
7							---	---	---	163	156	158
8							---	---	---	163	160	161
9							---	---	---	164	153	157
10							---	---	---	154	150	---
11							---	---	---	---	---	---
12							---	---	---	170	166	---
13							---	---	---	172	167	170
14							---	---	---	176	170	173
15							---	---	---	180	171	174
16							---	---	---	179	172	175
17							---	---	---	181	174	177
18							---	---	---	186	164	179
19							---	---	---	166	139	155
20							---	---	---	176	168	172
21							---	---	---	183	177	180
22							---	---	---	187	181	185
23							---	---	---	191	186	189
24							---	---	---	194	189	191
25							---	---	---	196	191	193
26							---	---	---	202	193	196
27							---	---	---	210	199	204
28							---	---	---	202	198	200
29							173	169	---	202	198	200
30							171	165	169	200	195	198
31							---	---	---	201	195	197
MONTH							---	---	---	210	109	178

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	203	174	192	200	187	194	232	198	215	227	221	224
2	188	172	181	200	196	199	222	211	215	224	219	222
3	203	175	190	201	196	199	223	184	212	231	222	225
4	205	194	200	200	198	200	203	177	189	232	224	227
5	208	199	205	202	200	201	215	203	208	232	226	228
6	208	203	205	204	195	200	228	205	213	232	225	228
7	204	196	198	210	197	202	218	210	215	232	225	228
8	204	196	200	406	203	320	210	198	203	235	228	231
9	202	173	200	425	399	417	212	182	194	241	222	235
10	179	166	172	420	295	351	213	176	196	241	234	237
11	185	172	180	402	297	334	209	170	183	247	236	239
12	193	183	189	399	287	337	208	195	202	252	240	243
13	195	189	193	403	318	361	222	186	208	260	242	248
14	199	194	196	351	116	179	209	200	204	253	236	243
15	198	194	196	162	142	151	212	209	210	246	238	242
16	197	193	195	211	159	170	214	209	211	246	232	242
17	197	195	---	213	164	177	212	206	210	231	218	222
18	199	197	---	179	157	161	216	212	214	228	222	224
19	203	197	200	158	113	139	221	216	218	240	227	233
20	202	188	200	164	137	152	222	219	220	234	228	230
21	213	184	192	191	165	178	224	219	221	230	221	224
22	202	195	197	231	188	207	222	200	209	239	225	231
23	203	195	198	225	195	219	210	199	204	242	223	232
24	206	197	201	222	221	221	217	211	214	236	212	221
25	208	111	185	231	199	219	220	216	218	220	199	207
26	161	111	145	232	154	193	222	219	221	216	203	212
27	177	162	170	227	203	220	222	220	221	227	164	215
28	186	178	182	226	222	223	222	207	216	232	228	230
29	197	181	190	225	219	222	222	214	218	240	233	238
30	192	185	190	222	218	220	226	218	221	241	237	239
31	---	---	---	227	210	217	228	222	225	---	---	---
MONTH	213	111	191	425	113	225	232	170	211	260	164	230
YEAR	425	109	207									

01399700 ROCKAWAY CREEK AT WHITEHOUSE, NJ--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1							---	---	---	19.5	11.0	15.0
2							---	---	---	17.0	13.5	15.5
3							---	---	---	20.0	14.0	17.0
4							---	---	---	16.0	13.0	14.0
5							---	---	---	17.0	12.5	14.5
6							---	---	---	21.5	15.0	18.0
7							---	---	---	20.0	17.0	18.5
8							---	---	---	19.5	13.5	16.5
9							---	---	---	15.5	11.5	13.0
10							---	---	---	11.5	9.5	---
11							---	---	---	---	---	---
12							---	---	---	18.5	16.0	---
13							---	---	---	20.5	14.5	17.0
14							---	---	---	19.5	12.5	16.0
15							---	---	---	19.5	12.0	15.5
16							---	---	---	19.5	12.5	16.5
17							---	---	---	22.5	15.0	18.5
18							---	---	---	24.0	18.0	20.5
19							---	---	---	20.5	18.5	19.0
20							---	---	---	23.0	16.5	19.5
21							---	---	---	23.5	18.5	21.0
22							---	---	---	24.5	18.5	21.0
23							---	---	---	24.0	18.5	21.5
24							---	---	---	25.0	19.5	22.0
25							---	---	---	24.5	20.5	22.5
26							---	---	---	25.0	19.0	21.0
27							---	---	---	24.0	17.0	20.5
28							---	---	---	25.5	18.0	21.5
29							16.5	13.0	---	24.0	19.0	21.0
30							18.0	9.5	13.5	21.0	16.5	18.5
31							---	---	---	22.5	15.5	19.0
MONTH							---	---	---	25.5	9.5	18.5

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	19.0	17.5	18.0	24.0	21.0	22.5	23.5	21.0	22.5	26.0	22.5	24.0
2	23.0	17.0	19.5	25.5	20.0	22.5	26.5	20.0	22.5	28.0	23.0	25.0
3	21.5	17.5	19.5	25.0	18.0	22.0	22.5	20.0	21.0	27.0	23.5	25.0
4	23.0	15.0	18.5	26.0	19.5	23.0	25.0	20.0	22.0	25.5	21.5	23.5
5	23.0	17.0	19.5	26.5	21.5	24.0	26.0	22.0	24.0	24.0	21.5	22.5
6	18.5	15.5	17.0	26.5	23.0	24.0	27.0	22.5	24.5	25.0	22.0	23.5
7	18.5	14.5	16.5	24.0	22.5	23.0	27.0	23.0	25.0	24.5	21.5	23.0
8	20.0	13.5	16.5	26.0	22.0	23.5	28.5	23.0	25.5	22.5	19.0	21.0
9	16.0	14.0	15.0	26.0	23.0	24.5	27.0	23.5	25.0	22.0	18.0	20.0
10	16.0	14.0	15.0	26.5	22.5	24.5	26.0	22.0	23.5	24.0	20.0	21.5
11	18.0	14.0	16.0	24.5	17.0	20.5	27.0	22.5	24.5	22.0	17.5	19.5
12	21.5	15.5	18.0	24.0	21.5	23.0	26.0	23.5	24.5	19.5	14.0	17.0
13	24.0	18.0	20.5	27.5	22.5	24.5	24.0	22.0	22.5	19.0	16.0	17.5
14	22.0	18.5	20.0	25.5	20.0	23.0	23.0	22.0	22.5	21.0	18.0	19.0
15	22.5	18.5	20.5	30.0	22.0	25.0	26.0	21.0	23.0	19.0	15.5	17.5
16	24.5	18.5	21.5	30.0	23.5	26.5	23.0	20.5	21.5	18.0	16.5	17.5
17	22.5	18.0	---	31.5	25.0	28.0	23.5	22.0	22.5	21.5	17.5	19.0
18	25.0	23.5	---	32.5	26.0	28.5	23.5	19.5	21.5	23.0	18.0	20.5
19	28.5	22.5	25.0	28.0	19.5	23.5	22.5	17.0	19.5	24.0	20.0	22.0
20	24.5	21.0	23.0	26.5	24.5	25.5	23.0	18.0	20.0	22.5	19.0	21.0
21	24.0	20.0	22.0	29.0	25.5	27.0	22.0	16.0	19.0	18.5	17.0	17.5
22	25.0	18.0	21.0	27.5	22.0	25.0	22.0	18.5	20.0	17.0	15.5	16.0
23	25.0	17.5	21.0	27.0	19.0	22.5	22.0	18.0	20.0	17.0	15.0	16.0
24	23.5	18.5	21.5	28.0	20.5	23.5	20.5	18.0	19.5	16.5	15.0	16.5
25	21.5	19.0	20.0	24.0	22.0	22.5	22.5	17.0	19.5	15.0	13.5	14.5
26	24.0	19.0	21.5	22.0	17.0	20.0	22.5	16.0	19.0	16.0	13.5	15.0
27	26.5	19.5	23.0	25.0	17.0	20.5	22.0	17.5	20.0	16.5	14.5	16.0
28	24.0	21.0	22.5	24.0	17.5	20.5	25.5	19.5	22.5	18.0	14.5	16.0
29	26.5	22.0	23.5	24.5	18.0	21.0	26.5	22.0	24.0	17.0	13.5	15.0
30	26.0	20.5	23.0	24.5	20.5	22.5	27.0	23.0	24.5	17.5	13.5	15.5
31	---	---	---	27.0	20.5	23.5	24.5	23.0	23.5	---	---	---
MONTH	28.5	13.5	20.0	32.5	17.0	23.5	28.5	16.0	22.0	28.0	13.5	19.5
YEAR	32.5	9.5	20.5									

01399720 ROCKAWAY CREEK AT ISLAND ROAD AT WHITEHOUSE, NJ

LOCATION.--Lat 40°37'24", long 74°43'17", Hunterdon County, Hydrologic Unit 02030105, on right bank at bridge on Island Road, 0.6 mi (1.0 km) upstream from mouth, 0.9 mi (1.4 km) east of Whitehouse, and 2.5 mi (4.0 km) northwest of North Branch.

DRAINAGE AREA.--38.4 mi² (99.5 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1975 to current year.
CHEMICAL ANALYSES: March to July 1977.
SEDIMENT ANALYSES: March to July 1977.

REMARKS.--Site is sampled as part of a project to study the effects of supplemental releases from Round Valley Reservoir to the South Branch Rockaway Creek.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	COD IN BOTTOM MATERIAL (MG/KG)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	HARDNESS (CA,MG) (MG/L)
MAR 13...	1130	171	7.3	10.0	75	10.4	25	--	2.7	5200	833000	60
APR 19...	0915	180	5.0	13.0	2	15.6	9	28000	1.3	<20	--	51
JUN 25...	2055	106	7.1	21.5	50	8.7	55	--	9.2	47000	1200	39
JUL 05...	1020	231	8.5	25.0	1	10.6	10	39000	3.7	--	--	88

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
MAR 13...	28	15	5.4	8.5	2.1	39	0	32	3.1	--	22
APR 19...	9	17	2.0	6.6	1.3	49	1	42	.1	.0	20
JUN 25...	--	10	3.5	11	2.1	--	0	--	--	--	11
JUL 05...	45	22	8.0	8.2	1.7	53	--	43	.3	.0	18

DATE	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE IN BOT. MAT. (MG/KG)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)	TOTAL AMMONIA NITROGEN IN BOTTOM MAT. (MG/KG)
MAR 13...	11	--	--	--	98	--	--	--	--	.03	--
APR 19...	7.8	.1	.0	11	93	--	--	--	2.8	.01	41
JUN 25...	7.0	--	--	--	90	--	--	--	--	.00	--
JUL 05...	9.4	.1	.0	13	174	2	.95	.01	2.2	.01	20

DATE	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	TOTAL KJFL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN IN BOTTOM MATERIAL (N) (MG/KG)	DISSOLVED PHOSPHORUS (P) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS IN BOTTOM MATERIAL (MG/KG)	TOTAL ORGANIC CARBON (C) (MG/L)	DISSOLVED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)	INORGANIC CARBON IN BOTTOM MATERIAL (G/KG)
MAR 13...	.36	.39	--	--	.08	--	--	--	7.9	--	--
APR 19...	.26	.27	3300	3300	.01	--	300	--	.8	6.0	.1
JUN 25...	.50	.50	--	--	.50	--	--	--	4.1	--	--
JUL 05...	.53	.54	4300	4300	.01	.01	170	5.3	4.1	10	.1

01399720 ROCKAWAY CREEK AT ISLAND ROAD AT WHITEHOUSE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BARIUM (BA) (UG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)
APR 19...	0915	140	1	8	100	20	0	<10	1	<10
JUL 05...	1020	70	2	4	0	70	0	<10	3	<10

DATE	DISSOLVED COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	DISSOLVED COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	DISSOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	DISSOLVED LITHIUM (LI) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)
APR 19...	0	<10	3	<10	210	3500	0	<10	0	20
JUL 05...	0	<10	3	<10	30	1400	0	<10	0	30

DATE	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	DISSOLVED MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	DISSOLVED NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	DISSOLVED STRONTIUM (SR) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
APR 19...	510	.0	.0	0	<10	170	0	30	24	.0
JUL 05...	390	.0	.2	0	<10	180	0	20	92	.0

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
APR 19...	1	.0	.0	.0	.6	.0	.0	.0	.0	0
JUL 05...	7	.0	.0	.0	.0	.0	.0	.0	.0	0

01399720 ROCKAWAY CREEK AT ISLAND ROAD AT WHITEHOUSE, NJ--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
DEC					
20...	1515	15	2.5	9	.36
FEB					
11...	1530	E150	--	5	--
27...	1415	83	8.0	14	3.1
MAR					
13...	1120	141	--	354	135
APR					
19...	0915	48	13.0	4	.52
MAY					
24...	0900	--	21.0	7	--
JUN					
05...	1850	18	21.5	12	.58
06...	1425	19	17.0	10	.51
22...	1340	23	23.5	6	.37
25...	2045	462	--	1290	1610
JUL					
02...	1030	16	22.5	9	.39
05...	1010	13	25.0	55	1.9
SEP					
08...	1205	20	21.5	6	.32

01399760 LAMINGTON RIVER AT LAMINGTON ROAD NEAR NORTH BRANCH, NJ

LOCATION.--Lat 40°37'20", long 74°42'02", Hunterdon County, Hydrologic Unit 02030105, on right bank at bridge on Lamington Road, 1.6 mi (2.6 km) northwest of North Branch, 1.7 mi (2.7 km) upstream from mouth, and 2.4 mi (3.9 km) east of Whitehouse.

DRAINAGE AREA.--97.6 mi² (252.8 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: December 1976 to September 1977.
CHEMICAL ANALYSES: March to July 1977.
SEDIMENT ANALYSES: March to July 1977.

REMARKS.--Site is sampled as part of a project to study the effects of supplemental releases from Round Valley Reservoir to the South Branch Rockaway Creek.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	COD IN BOTTOM MATERIAL (MG/KG)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)
MAR										
13...	0758	190	7.5	10.0	3	10.6	12	--	1.9	8130
13...	1030	158	7.7	10.0	8	10.9	10	--	2.4	1000
13...	1134	176	7.7	10.0	25	11.0	17	--	2.5	81600
13...	1445	128	7.5	10.5	190	9.5	95	--	4.3	7800
13...	1605	121	7.4	11.0	190	10.1	81	--	4.0	5400
13...	1825	116	7.2	11.0	120	9.9	54	--	3.8	3600
13...	2222	116	7.6	11.0	75	9.8	42	--	4.8	3600
APR										
19...	1300	189	9.4	16.5	2	15.4	10	13000	1.6	<20
JUN										
06...	1145	218	7.8	17.0	4	9.1	7	--	1.3	640
25...	1340	228	8.7	21.0	1	11.2	11	--	1.6	460
25...	1755	223	8.5	20.5	1	9.5	16	--	5.0	82100
25...	1900	201	8.1	20.0	1	8.6	16	--	2.9	8400
25...	1952	187	7.7	19.0	3	8.3	35	--	5.0	12000
25...	2103	178	7.4	19.0	30	8.0	110	--	>9.5	24000
25...	2158	103	7.2	18.5	40	8.0	120	--	9.3	44000
25...	2242	109	7.2	18.5	30	8.0	110	--	6.6	40000
26...	0028	114	7.4	18.5	25	7.8	75	--	7.6	30000
26...	1330	154	7.6	22.5	6	9.6	40	--	3.1	--
JUL										
05...	1200	236	8.9	24.5	1	14.6	6	4400	2.0	8320
11...	0810	234	7.8	21.5	1	6.9	9	--	1.5	480
11...	1230	199	8.4	22.5	2	9.8	11	--	2.6	1800
14...	0755	218	8.2	22.5	1	7.2	10	--	1.8	8600
14...	1225	203	8.2	24.0	1	9.1	15	--	3.0	920
14...	1530	180	8.0	23.0	2	9.1	25	--	1.6	740
19...	0803	248	8.2	24.0	1	6.4	10	--	1.2	8290
19...	1228	174	7.9	21.0	8	9.0	15	--	1.4	2000
19...	1518	178	8.1	21.5	1	9.3	15	--	1.0	660
26...	0800	235	8.0	19.0	1	7.8	10	--	1.4	1200
26...	1240	165	7.8	20.0	6	9.1	20	--	1.3	780
26...	1415	163	7.8	19.0	5	9.5	30	--	1.4	540

01399760 LAMINGTON RIVER AT LAMINGTON ROAD NEAR NORTH BRANCH, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
MAR										
13...	B24000	67	28	15	7.1	11	1.6	48	0	39
13...	1000	60	25	15	5.5	10	1.6	43	0	35
13...	16000	62	28	14	6.6	10	1.7	41	0	34
13...	B66000	45	24	10	4.9	7.5	2.1	26	0	21
13...	B66000	44	25	11	3.9	6.5	2.0	23	0	19
13...	B51000	42	27	9.2	4.6	6.5	2.0	18	0	15
13...	B49000	23	--	4.0	3.2	9.4	2.1	--	--	--
APR										
19...	--	62	20	15	6.0	10	1.4	39	6	42
JUN										
06...	1600	75	15	18	7.3	11	1.6	73	0	60
25...	400	78	16	19	7.5	13	1.5	74	1	62
25...	6400	76	15	18	7.5	13	1.6	72	1	61
25...	15000	67	14	16	6.6	11	1.6	65	0	53
25...	39000	64	14	16	5.8	11	1.7	61	0	50
25...	88000	41	4	10	3.8	6.2	2.4	45	0	37
25...	83000	28	0	6.1	3.1	5.5	2.3	34	0	28
25...	98000	39	11	10	3.4	5.7	2.3	34	0	28
26...	400	40	11	10	3.6	6.1	2.2	35	0	29
26...	4600	52	17	13	4.7	8.1	2.0	43	0	35
JUL										
05...	920	82	21	20	7.8	12	1.5	62	6	61
11...	500	82	17	20	7.8	11	1.5	79	0	65
11...	830	85	21	21	8.0	9.3	1.6	72	3	64
14...	1100	77	19	19	7.1	10	1.8	71	0	58
14...	270	75	17	19	6.8	7.8	2.2	71	0	58
14...	760	63	7	16	5.7	6.8	1.7	68	0	56
19...	1000	86	14	21	8.1	12	1.7	88	0	72
19...	3500	61	3	15	5.7	7.1	2.3	71	0	58
19...	2400	64	8	16	5.8	6.5	1.6	68	0	56
26...	640	88	10	21	8.6	11	1.8	95	0	78
26...	2900	61	19	15	5.6	6.1	1.7	51	0	42
26...	1400	58	14	14	5.6	6.2	1.6	54	0	44

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	DISSOLVED NITRATE (N) (MG/L)
MAR										
13...	2.4	--	20	14	--	--	--	101	--	--
13...	1.4	--	20	14	--	--	--	102	--	--
13...	1.3	--	19	14	--	--	--	101	--	--
13...	1.3	--	16	10	--	--	--	73	--	--
13...	1.5	--	16	9.4	--	--	--	73	--	--
13...	1.8	--	16	9.3	--	--	--	77	--	--
13...	--	--	17	13	--	--	--	90	--	--
APR										
19...	.0	.0	18	12	.1	.1	7.5	116	--	--
JUN										
06...	1.9	--	20	14	--	--	--	138	--	1.5
25...	.2	--	19	16	--	--	--	140	--	--
25...	.4	--	18	15	--	--	--	153	--	--
25...	.8	--	16	13	--	--	--	123	--	--
25...	1.9	--	14	13	--	--	--	139	--	--
25...	2.9	--	11	7.0	--	--	--	98	--	--
25...	3.4	--	10	6.2	--	--	--	73	--	--
25...	3.4	--	11	6.8	--	--	--	86	--	--
26...	2.2	--	12	7.5	--	--	--	87	--	--
26...	1.7	--	15	9.8	--	--	--	99	--	--
JUL										
05...	.1	.0	18	14	.1	.1	9.9	173	3	.81
11...	2.0	--	20	14	--	--	--	125	--	.86
11...	.5	--	20	12	--	--	--	150	--	.94
14...	.7	--	17	12	--	--	--	132	--	.82
14...	.7	--	18	10	--	--	--	137	--	.48
14...	1.1	--	17	9.5	--	--	--	103	--	.18
19...	.9	--	15	14	--	--	--	146	--	.71
19...	1.4	--	15	9.1	--	--	--	100	--	.15
19...	.9	--	18	8.5	--	--	--	99	--	.12
26...	1.5	--	18	14	--	--	--	152	--	.93
26...	1.3	--	18	8.4	--	--	--	108	--	.11
26...	1.4	--	18	8.3	--	--	--	82	--	.10

01399760 LAMINGTON RIVER AT LAMINGTON ROAD NEAR NORTH BRANCH, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	DISSOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE IN BOT. MAT. (MG/KG)	TOTAL AMMONIA NITROGEN (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)	TOTAL AMMONIA NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL ORGANIC NITROGEN (N) (MG/L)	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)
MAR										
13...	--	--	--	.00	--	--	.33	--	.33	--
13...	--	--	--	.00	--	--	.16	--	.16	--
13...	--	--	--	.02	--	--	.22	--	.24	--
13...	--	--	--	.05	--	--	.26	--	.31	--
13...	--	--	--	.03	--	--	.44	--	.47	--
13...	--	--	.09	.00	--	1.6	.48	1.7	.48	--
13...	--	--	--	.00	--	--	.68	--	.68	--
APR										
19...	--	.0	--	.00	31	--	1.2	--	1.2	1900
JUN										
06...	.03	--	--	.07	--	--	.22	--	.29	--
25...	--	--	--	.05	--	--	.23	--	.28	--
25...	--	--	--	.06	--	--	.30	--	.36	--
25...	--	--	--	.03	--	--	.26	--	.29	--
25...	--	--	--	.05	--	--	.69	--	.74	--
25...	--	--	--	.07	--	--	.39	--	.46	--
25...	--	--	--	.00	--	--	.59	--	.59	--
25...	--	--	--	.00	--	--	.52	--	.52	--
26...	--	--	--	.00	--	--	.48	--	.48	--
26...	--	--	--	.02	--	--	.55	--	.57	--
JUL										
05...	.01	2.3	--	.05	9.2	--	.43	--	.48	600
11...	.01	--	--	.04	--	--	.13	--	.17	--
11...	.01	--	--	.02	--	--	.04	--	.06	--
14...	.02	--	--	.03	--	--	.36	--	.39	--
14...	.01	--	--	.00	--	--	.23	--	.23	--
14...	.01	--	--	.01	--	--	.14	--	.15	--
19...	.02	--	--	.04	--	--	.26	--	.30	--
19...	.01	--	--	.00	--	--	.42	--	.42	--
19...	.00	--	--	.01	--	--	.44	--	.45	--
26...	.01	--	--	.05	--	--	.30	--	.35	--
26...	.00	--	--	.04	--	--	.24	--	.28	--
26...	.01	--	--	.04	--	--	.41	--	.45	--

DATE	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN IN BOTTOM MATERIAL (N) (MG/KG)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS IN BOTTOM MATERIAL (MG/KG)	TOTAL ORGANIC CARBON (C) (MG/L)	DISSOLVED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)	INORGANIC CARBON IN BOTTOM MATERIAL (G/KG)
MAR										
13...	--	--	--	.01	--	--	--	6.0	--	--
13...	--	--	--	.04	--	--	--	7.1	--	--
13...	--	--	--	.02	--	--	--	4.5	--	--
13...	--	--	--	.04	--	--	--	7.2	--	--
13...	--	--	--	.04	--	--	--	8.2	--	--
13...	2.4	--	.31	.04	--	--	--	6.5	--	--
13...	--	--	--	.04	--	--	--	5.1	--	--
APR										
19...	--	1900	--	.01	--	190	--	1.2	6.2	.1
JUN										
06...	--	--	--	.06	.05	--	--	2.5	--	--
25...	--	--	--	.07	--	--	--	4.1	--	--
25...	--	--	--	.10	--	--	--	5.1	--	--
25...	--	--	--	.08	--	--	--	4.7	--	--
25...	--	--	--	.10	--	--	--	4.2	--	--
25...	--	--	--	.09	--	--	--	3.1	--	--
25...	--	--	--	.06	--	--	--	4.3	--	--
25...	--	--	--	.18	--	--	--	5.0	--	--
26...	--	--	--	.05	--	--	--	4.2	--	--
26...	--	--	--	.07	--	--	--	3.0	--	--
JUL										
05...	--	600	--	.04	.03	500	6.0	--	1.7	.0
11...	--	--	--	.06	.01	--	--	4.5	--	--
11...	--	--	--	.03	.02	--	--	3.7	--	--
14...	--	--	--	.07	.01	--	--	3.2	--	--
14...	--	--	--	.04	.02	--	--	2.1	--	--
14...	--	--	--	.02	.01	--	--	4.0	--	--
19...	--	--	--	.07	.05	--	--	2.8	--	--
19...	--	--	--	.02	.00	--	--	3.0	--	--
19...	--	--	--	.03	.00	--	--	3.1	--	--
26...	--	--	--	.04	.01	--	--	4.0	--	--
26...	--	--	--	.01	.01	--	--	3.9	--	--
26...	--	--	--	.01	.00	--	--	3.6	--	--

01399760 LAMINGTON RIVER AT LAMINGTON ROAD NEAR NORTH BRANCH, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BARIUM (BA) (UG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)
APR 19...	1300	130	1	5	0	10	0	<10	13	<10
JUL 05...	1200	70	2	5	0	60	0	<10	4	<10

DATE	DISSOLVED COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	DISSOLVED COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	DISSOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	DISSOLVED LITHIUM (LI) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)
APR 19...	0	<10	0	20	80	3000	0	<10	0	20
JUL 05...	0	<10	2	<10	60	620	0	<10	0	10

DATE	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	DISSOLVED MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	DISSOLVED NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	DISSOLVED STRONTIUM (SR) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
APR 19...	380	.0	.0	4	<10	170	0	30	0	.0
JUL 05...	250	.0	.0	0	<10	60	20	10	3	.0

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
APR 19...	5	.0	.0	.0	.0	.0	.0	.0	.0	0
JUL 05...	3	.0	.0	.0	.0	.0	.0	.0	.0	0

01399760 LAMINGTON RIVER AT LAMINGTON ROAD NEAR NORTH BRANCH, NJ--Continued

SEDIMENT DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
FEB					
27...	1445	300	6.5	23	19
MAR					
13...	0800	144	--	6	2.6
13...	1030	191	10.0	18	9.3
13...	1130	293	10.0	105	83
13...	1330	1100	--	844	2510
13...	1445	1700	10.5	1220	5600
13...	1605	1850	11.0	933	4660
13...	1820	1350	--	434	1580
13...	2222	805	11.0	280	609
18...	1230	227	4.5	32	20
18...	1410	245	4.5	15	9.9
18...	1800	278	4.5	16	12
APR					
19...	1245	149	--	8	3.2
JUN					
06...	1145	40	17.0	12	1.3
06...	1245	41	17.0	25	2.8
06...	1345	42	17.0	15	1.7
22...	1410	42	23.0	5	.57
25...	1340	39	21.0	5	.53
25...	1755	43	20.5	13	1.5
25...	1835	76	20.0	78	16
25...	1900	102	20.0	108	30
25...	1950	587	19.0	994	1580
25...	2105	1200	19.0	1443	4680
25...	2155	1150	--	1186	3680
25...	2245	905	18.5	1025	2510
26...	0030	590	18.5	660	1050
26...	0115	482	--	492	640
26...	0155	417	18.5	427	481
26...	0250	350	18.5	371	351
26...	0350	293	18.5	284	225
26...	0525	* 238	18.0	203	130
26...	1330	155	22.5	56	23
JUL					
02...	1055	40	21.5	6	.65
11...	0810	38	21.5	28	2.9
11...	1230	108	22.5	18	5.2
11...	1415	42	19.5	34	3.9
14...	0750	40	--	9	.97
14...	1225	203	24.0	105	58
14...	1530	203	23.0	65	36

01399760 LAMINGTON RIVER AT LAMINGTON ROAD NEAR NORTH BRANCH, NJ--Continued

SEDIMENT DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM
JUL								
19...	0803	34	24.0	6	.55	--	--	--
19...	0935	34	25.0	5	.46	--	--	--
19...	1045	123	26.0	74	25	--	--	--
19...	1050	185	26.5	51	25	--	--	--
19...	1055	219	--	82	48	--	--	--
19...	1100	245	27.0	146	97	--	--	--
19...	1105	265	27.0	199	142	--	--	--
19...	1110	270	26.5	189	138	--	--	--
19...	1115	280	26.5	176	133	--	--	--
19...	1120	285	26.0	187	144	--	--	--
19...	1125	288	25.5	194	151	--	--	--
19...	1130	290	25.0	195	153	--	--	--
19...	1140	290	24.0	167	131	37	54	70
19...	1155	295	--	193	154	--	--	--
19...	1215	295	22.5	188	150	--	--	--
19...	1225	300	--	288	233	--	--	--
19...	1300	306	22.0	113	93	36	53	70
19...	1345	300	22.5	107	87	--	--	--
19...	1420	300	22.5	94	76	--	--	--
19...	1500	300	23.0	94	76	--	--	--
19...	1515	300	--	86	70	--	--	--
19...	1555	280	23.0	95	72	--	--	--
19...	1605	250	22.5	99	67	--	--	--
19...	1620	215	22.5	91	53	--	--	--
19...	1635	185	23.0	71	35	--	--	--
19...	1655	146	23.0	71	28	--	--	--
19...	1715	119	23.0	49	16	--	--	--
19...	1805	53	23.5	32	4.6	--	--	--
19...	1825	42	24.0	25	2.8	--	--	--
19...	1925	38	24.5	21	2.2	--	--	--
26...	0800	38	19.0	5	.51	--	--	--
26...	0945	38	20.0	3	.31	--	--	--
26...	1030	111	20.0	61	18	--	--	--
26...	1035	182	20.5	145	71	--	--	--
26...	1040	245	21.0	116	77	--	--	--
26...	1045	295	21.5	221	176	--	--	--
26...	1050	335	21.0	273	247	--	--	--
26...	1055	359	21.0	332	322	--	--	--
26...	1100	388	21.0	321	336	--	--	--

01399760 LAMINGTON RIVER AT LAMINGTON ROAD NEAR NORTH BRANCH, NJ--Continued

SEDIMENT DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM	SUS. SED. SIEVE DIAM. % FINER THAN 2.00 MM
JUL							
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	82	92	94	96	97	99	100
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	81	89	94	97	99	100	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--

01399760 LAMINGTON RIVER AT LAMINGTON ROAD NEAR NORTH BRANCH, NJ--Continued

SEDIMENT DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
JUL												
26...	1105	400	20.5	332	359	--	--	--	--	--	--	--
26...	1110	411	20.0	329	365	--	--	--	--	--	--	--
26...	1115	417	20.0	322	363	--	--	--	--	--	--	--
26...	1120	423	19.5	308	352	--	--	--	--	--	--	--
26...	1125	429	19.0	310	359	--	--	--	--	--	--	--
26...	1130	435	19.0	288	338	--	--	--	--	--	--	--
26...	1135	441	19.0	285	339	--	--	--	--	--	--	--
26...	1140	441	19.0	279	332	--	--	--	--	--	--	--
26...	1150	446	19.0	271	326	99	99	99	99	99	100	--
26...	1210	446	20.0	227	273	--	--	--	--	--	--	--
26...	1225	446	20.0	202	243	33	50	70	85	96	99	100
26...	1240	446	20.0	193	232	--	--	--	--	--	--	--
26...	1330	446	20.0	142	171	--	--	--	--	--	--	--
26...	1410	446	20.0	112	135	--	--	--	--	--	--	--
26...	1446	411	20.0	104	115	--	--	--	--	--	--	--
26...	1500	370	20.0	88	88	--	--	--	--	--	--	--
26...	1515	300	20.5	72	58	--	--	--	--	--	--	--
26...	1530	236	20.5	69	44	--	--	--	--	--	--	--
26...	1545	189	20.0	63	32	--	--	--	--	--	--	--
26...	1600	160	20.0	49	21	--	--	--	--	--	--	--
26...	1615	131	20.5	37	13	--	--	--	--	--	--	--
26...	1630	106	20.5	28	8.0	--	--	--	--	--	--	--
26...	1645	88	21.5	23	5.5	--	--	--	--	--	--	--
26...	1700	69	21.0	23	4.3	--	--	--	--	--	--	--
26...	1715	53	21.0	19	2.7	--	--	--	--	--	--	--
26...	1730	42	21.5	11	1.2	--	--	--	--	--	--	--
26...	1800	40	21.5	11	1.2	--	--	--	--	--	--	--
26...	1830	39	21.5	8	.84	--	--	--	--	--	--	--
26...	2200	36	21.0	9	.87	--	--	--	--	--	--	--
SEP												
08...	1235	34	21.0	24	2.2	--	--	--	--	--	--	--

01399780 LAMINGTON (BLACK) RIVER AT BURNT MILLS, NJ

LOCATION.--Lat 40°38'04", long 74°41'13", Somerset County, Hydrologic Unit 02030105, at bridge on Burnt Mills Road in Burnt Mills, 1,400 ft (427 m) upstream from mouth, 2.4 mi (3.9 km) southwest of Greater Cross Roads.

DRAINAGE AREA.--100 mi^2 (259 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1964, 1975 to current year.
CHEMICAL ANALYSES: Water years 1964, 1976 to current year.
SEDIMENT ANALYSES: March to July 1977.

REMARKS.--Site is sampled as part of a project to study the effect of supplemental releases from Round Valley Reservoir to the South Branch Rockaway Creek.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Selected analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	COD IN BOTTOM MATERIAL (MG/KG)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL COLIFORM .7UM-MF (COL./100 ML)
OCT											
12...	1200	209	8.2	9.0	4	11.6	--	--	1.0	110	--
NOV											
15...	1430	236	7.4	3.5	2	14.2	--	--	--	790	--
FEB											
23...	1005	258	7.1	.0	1	15.6	--	--	2.0	50	--
MAR											
13...	1652	119	7.0	11.0	170	9.9	63	--	4.7	--	6400
14...	1410	132	7.0	10.0	40	10.4	--	--	--	790	--
APR											
18...	1300	188	8.9	14.0	1	10.4	--	--	--	<20	--
19...	1310	191	9.5	17.5	1	15.7	13	5400	1.7	--	40
MAY											
11...	1000	175	8.2	12.0	2	12.8	--	--	2.0	330	--
JUN											
13...	1300	172	7.9	23.0	4	10.0	--	--	--	50	--
26...	0115	121	7.2	19.0	25	8.1	60	--	7.4	--	817000
JUL											
05...	1330	237	9.1	25.0	1	12.0	6	2000	1.9	--	94
11...	0930	233	7.9	22.0	1	7.1	9	--	1.6	--	860
11...	1530	225	8.8	24.0	2	8.5	15	--	2.1	--	4200
14...	0955	218	7.8	23.5	1	7.6	10	--	1.6	--	580
14...	1345	213	8.1	26.0	1	8.7	20	--	3.2	--	2100
14...	1635	183	7.9	24.5	2	8.6	20	--	1.5	--	700
19...	1035	245	8.3	26.5	1	8.5	5	--	1.2	--	100
19...	1325	193	8.0	24.0	2	8.6	20	--	2.3	--	1000
19...	1545	179	8.0	23.0	1	9.4	15	--	1.5	--	1200
21...	1115	215	8.3	24.0	1	10.0	--	--	--	330	--
26...	1010	230	8.2	20.5	1	9.3	30	--	1.4	--	410
26...	1255	176	7.9	19.5	5	8.8	30	--	2.2	--	1200
26...	1500	163	8.0	20.0	4	9.0	30	--	1.6	--	500
AUG											
09...	1200	213	7.9	22.0	2	9.6	--	--	3.0	20	--

01399780 LAMINGTON (BLACK) RIVER AT BURNT MILLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	FECAL STREP-TOCOCCI (MPN)	FECAL STREP-TOCOCCI KF AGAR (COL. PER 100 ML)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
OCT											
12...	540	--	67	--	16	6.5	11	2.0	--	--	--
NOV											
15...	79	--	83	--	20	8.0	13	1.6	--	--	--
FEB											
23...	540	--	78	--	19	7.3	16	2.0	--	--	--
MAR											
13...	--	B42000	37	21	9.5	3.2	7.2	3.5	20	0	16
14...	1600	--	40	--	9.9	3.8	7.0	1.8	--	--	--
APR											
18...	<2	--	79	--	28	2.1	9.0	1.2	--	--	--
19...	--	B320	66	22	16	6.2	10	1.4	44	5	44
MAY											
11...	13	--	70	--	18	6.1	9.8	1.4	--	--	--
JUN											
13...	140	--	56	--	14	5.2	11	1.1	--	--	--
26...	--	95000	43	13	11	3.8	11	2.2	37	0	30
JUL											
05...	--	640	82	19	20	7.8	12	1.5	54	11	63
11...	--	440	82	17	20	7.8	11	1.5	79	0	65
11...	--	B330	85	21	21	7.8	9.4	2.5	74	2	64
14...	--	240	77	19	19	7.1	10	1.8	71	0	58
14...	--	1300	77	19	19	7.1	8.4	2.0	71	0	58
14...	--	700	64	17	16	5.9	6.8	1.9	57	0	47
19...	--	1200	90	18	22	8.4	12	1.8	88	0	72
19...	--	4600	69	16	17	6.5	7.5	2.4	65	0	53
19...	--	1100	64	18	16	5.9	6.5	1.6	56	0	46
21...	23	--	78	--	19	7.4	9.8	1.9	--	--	--
26...	--	1100	87	18	21	8.4	11	1.8	84	0	69
26...	--	5000	65	16	16	6.0	6.6	2.1	60	0	49
26...	--	1800	61	17	15	5.7	6.0	1.6	54	0	44
AUG											
09...	540	--	73	--	18	6.9	12	2.1	--	--	--

DATE	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOL-VED SUL-FIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)
OCT											
12...	--	.4	21	15	--	--	14	123	8	--	--
NOV											
15...	--	--	23	14	--	--	--	179	1	--	--
FEB											
23...	--	--	23	21	--	--	--	133	7	--	--
MAR											
13...	3.2	--	16	9.3	--	--	--	76	--	--	--
14...	--	--	17	9.6	--	--	--	93	66	--	--
APR											
18...	--	--	19	13	--	--	--	96	2	--	--
19...	.0	.0	19	12	.1	.1	7.3	97	--	--	--
MAY											
11...	--	--	18	12	--	--	9.1	163	4	--	--
JUN											
13...	--	--	19	14	--	--	--	116	13	--	--
26...	3.7	--	13	9.4	--	--	--	91	--	--	--
JUL											
05...	.1	.0	18	14	.1	.1	9.1	170	5	--	.74
11...	1.6	--	20	14	--	--	--	121	--	--	.82
11...	.2	--	21	12	--	--	--	130	--	--	.76
14...	1.8	--	17	13	--	--	--	120	--	--	.76
14...	.9	--	18	10	--	--	--	134	--	--	.59
14...	1.1	--	17	9.2	--	--	--	105	--	--	.24
19...	.7	--	18	14	--	--	--	130	--	--	.61
19...	1.0	--	19	9.4	--	--	--	101	--	--	.14
19...	.9	--	18	8.7	--	--	--	94	--	--	.12
21...	--	--	20	12	--	--	--	97	1	.64	--
26...	.8	--	18	12	--	--	--	128	--	--	.68
26...	1.2	--	18	9.0	--	--	--	109	--	--	.16
26...	.9	--	18	8.4	--	--	--	89	--	--	.10
AUG											
09...	--	--	22	15	--	--	--	137	4	.59	--

01399780 LAMINGTON (BLACK) RIVER AT BURNT MILLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL NITRITE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE IN BOT. MAT. (MG/KG)	TOTAL AMMONIA NITROGEN (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)	TOTAL AMMONIA NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL ORGANIC NITROGEN (N) (MG/L)	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)
OCT											
12...	--	--	--	--	--	--	--	--	1.1	--	150
NOV											
15...	--	--	--	--	--	--	--	--	1.3	--	--
FEB											
23...	--	--	--	--	--	--	--	--	1.4	--	--
MAR											
13...	--	--	--	--	.03	--	--	.45	--	.48	--
14...	--	--	--	--	--	--	--	--	1.4	--	--
APR											
18...	--	--	--	--	--	--	--	--	1.0	--	--
19...	--	--	.0	--	.01	9.9	--	.40	--	.41	590
MAY											
11...	--	--	--	--	--	--	--	--	1.4	--	--
JUN											
13...	--	--	--	--	--	--	--	--	1.4	--	--
26...	--	--	--	--	.00	--	--	.54	--	.54	--
JUL											
05...	--	.01	2.8	--	.03	4.3	--	.53	--	.56	580
11...	--	.01	--	--	.01	--	--	.19	--	.20	--
11...	--	.01	--	--	.00	--	--	.45	--	.45	--
14...	--	.01	--	--	.00	--	--	.25	--	.25	--
14...	--	.01	--	--	.00	--	--	.23	--	.23	--
14...	--	.01	--	--	.01	--	--	.23	--	.24	--
19...	--	.01	--	--	.00	--	--	.26	--	.26	--
19...	--	.00	--	--	.01	--	--	.25	--	.26	--
19...	--	.00	--	--	.02	--	--	.38	--	.40	--
21...	.01	--	--	.07	--	--	.31	--	.38	--	--
26...	--	.01	--	--	.02	--	--	.25	--	.27	--
26...	--	.00	--	--	.04	--	--	.22	--	.26	--
26...	--	.00	--	--	.02	--	--	.25	--	.27	--
AUG											
09...	.01	--	--	.03	--	--	.61	--	.64	--	--

DATE	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN IN BOTTOM MATERIAL (N) (MG/KG)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS IN BOTTOM MATERIAL (MG/KG)	TOTAL ORGANIC CARBON (C) (MG/L)	DISSOLVED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)	INORGANIC CARBON IN BOTTOM MATERIAL (G/KG)
OCT											
12...	--	--	--	--	--	--	--	--	--	1.3	--
NOV											
15...	--	--	--	--	--	--	--	1.5	--	--	--
FEB											
23...	--	--	.19	--	--	--	--	2.9	--	--	--
MAR											
13...	--	--	--	.03	--	--	--	--	8.1	--	--
14...	--	--	.10	--	--	--	--	8.5	--	--	--
APR											
18...	--	--	.03	--	--	--	--	6.1	--	--	--
19...	--	590	--	.01	--	--	160	--	2.8	1.2	.0
MAY											
11...	--	--	.01	--	--	--	--	5.2	--	--	--
JUN											
13...	--	--	.05	--	--	--	--	6.0	--	--	--
26...	--	--	--	.05	--	--	--	--	7.2	--	--
JUL											
05...	--	580	--	.04	--	.03	350	5.8	2.5	.9	.0
11...	--	--	--	.05	--	.01	--	--	3.8	--	--
11...	--	--	--	.04	--	.01	--	--	4.0	--	--
14...	--	--	--	.04	--	.03	--	--	2.8	--	--
14...	--	--	--	.04	--	.01	--	--	2.8	--	--
14...	--	--	--	.03	--	.01	--	--	3.8	--	--
19...	--	--	--	.06	--	.03	--	--	2.6	--	--
19...	--	--	--	.02	--	.00	--	--	3.4	--	--
19...	--	--	--	.01	--	.00	--	--	4.1	--	--
21...	1.0	--	.06	--	.03	--	--	7.1	--	--	--
26...	--	--	--	.04	--	.00	--	--	3.8	--	--
26...	--	--	--	.01	--	.01	--	--	4.5	--	--
26...	--	--	--	.01	--	.00	--	--	3.6	--	--
AUG											
09...	1.2	--	.12	--	.06	--	--	5.4	--	--	--

01399780 LAMINGTON (BLACK) RIVER AT BURNT MILLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BARIUM (BA) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)
OCT											
12...	1200	80	70	10	0	--	5	--	60	1	--
APR											
19...	1310	--	--	130	--	1	3	100	20	--	0
MAY											
11...	1000	--	--	20	1	--	--	--	0	0	--
JUL											
05...	1330	--	--	50	--	2	6	0	70	--	0

DATE	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)
OCT											
12...	0	--	16	0	0	--	10	0	--	0	250
APR											
19...	<10	7	<10	--	--	0	<10	--	0	<10	--
MAY											
11...	--	--	--	0	0	--	--	0	--	--	--
JUL											
05...	<10	4	<10	--	--	0	<10	--	0	<10	--

DATE	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	DISSOLVED LITHIUM (LI) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)
OCT											
12...	130	7600	1	--	6	--	40	--	440	<.5	--
APR											
19...	70	1900	--	0	<10	0	--	10	350	--	.0
MAY											
11...	140	--	5	--	--	--	40	--	--	.0	--
JUL											
05...	60	690	--	0	<10	0	--	20	300	--	.0

DATE	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	DISSOLVED NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	DISSOLVED STRONTIUM (SR) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)
OCT											
12...	.0	0	--	10	0	--	0	--	32	--	0
APR											
19...	.0	--	0	<10	--	150	--	0	20	--	0
MAY											
11...	--	0	--	--	0	--	40	--	--	0	--
JUL											
05...	.3	--	2	<10	--	150	--	20	20	--	0

DATE	ALDRIN IN BOTTOM MATERIAL (UG/KG)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT											
12...	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
APR											
19...	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
MAY											
11...	--	--	--	--	--	--	--	--	--	--	--
JUL											
05...	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0

01399780 LAMINGTON (BLACK) RIVER AT BURNT MILLS, NJ--Continued

SEDIMENT DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
FEB					
27...	1500	375	7.0	25	25
APR					
19...	1310	230	17.5	8	5.0
JUN					
10...	1035	305	14.5	66	54
10...	1200	288	15.5	57	44
10...	1305	273	16.0	85	63
22...	1420	55	23.0	5	.74
26...	0015	628	--	501	849
JUL					
02...	1105	48	22.0	9	1.2
11...	0930	40	22.0	9	.97
11...	1150	47	23.0	16	2.0
11...	1200	53	23.0	16	2.3
11...	1210	65	23.0	16	2.8
11...	1220	74	23.0	17	3.4
11...	1230	84	23.0	15	3.4
11...	1240	90	23.0	17	4.1
11...	1315	96	23.0	15	3.9
11...	1335	98	23.5	14	3.7
11...	1355	98	24.0	16	4.2
11...	1420	98	24.0	14	3.7
11...	1450	98	24.0	13	3.4
11...	1520	98	24.0	14	3.7
11...	1530	98	24.0	22	5.8
11...	1610	98	24.0	16	4.2
11...	1640	98	23.5	16	4.2
11...	1710	98	23.0	16	4.2
11...	1740	98	22.5	15	4.0
11...	1810	88	22.0	16	3.8
11...	1835	76	22.0	14	2.9
11...	1905	66	22.0	14	2.5
11...	1935	58	21.5	15	2.3
11...	2015	50	21.0	14	1.9
11...	2045	48	21.0	17	2.2
11...	2115	45	21.0	13	1.6
14...	0955	48	23.5	3	.39
14...	1144	57	25.0	7	1.1
14...	1150	73	25.0	13	2.6
14...	1157	100	25.0	21	5.7
14...	1205	134	25.0	24	8.7
14...	1212	154	25.0	38	16

01399780 LAMINGTON (BLACK) RIVER AT BURNT MILLS, NJ--Continued

SEDIMENT DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
JUL					
14...	1219	173	25.0	47	22
14...	1228	188	25.5	46	23
14...	1238	198	25.5	58	31
14...	1246	205	26.0	63	35
14...	1255	208	26.0	52	29
14...	1304	208	26.0	59	33
14...	1333	208	26.0	63	35
14...	1345	208	26.0	58	33
14...	1400	208	25.5	97	54
14...	1415	208	25.5	63	35
14...	1445	208	25.0	58	33
14...	1520	210	25.0	71	40
14...	1605	208	25.0	84	47
14...	1635	210	24.5	67	38
14...	1705	200	24.5	59	32
14...	1715	200	24.5	55	30
14...	1725	193	24.5	36	19
14...	1740	169	24.5	43	20
14...	1800	144	24.0	38	15
14...	1830	112	24.0	30	9.1
14...	1900	90	24.0	24	5.8
14...	1930	73	24.0	21	4.1
14...	2030	47	23.5	17	2.2
19...	1035	34	26.5	34	3.1
19...	1126	35	27.5	29	2.7
19...	1132	48	27.5	30	3.9
19...	1136	73	27.5	58	11
19...	1141	128	27.5	200	69
19...	1148	178	27.5	106	51
19...	1154	218	27.5	124	73
19...	1200	248	27.5	170	114
19...	1206	268	27.5	139	101
19...	1214	283	27.5	139	106
19...	1221	293	27.5	141	112
19...	1227	300	27.0	140	113
19...	1236	300	26.5	128	104
19...	1257	310	--	131	110
19...	1306	310	24.5	133	111
19...	1325	310	24.0	137	115

01399780 LAMINGTON (BLACK) RIVER AT BURNT MILLS, NJ--Continued

SEDIMENT DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM
JUL							
19...	1426	310	23.0	110	92	--	--
19...	1447	310	23.0	100	84	--	--
19...	1510	310	23.0	99	83	--	--
19...	1533	318	23.0	90	77	--	--
19...	1545	318	23.0	86	74	--	--
19...	1613	308	23.0	82	68	--	--
19...	1629	295	23.0	75	60	--	--
19...	1644	268	23.0	71	51	--	--
19...	1707	218	23.0	67	39	--	--
19...	1726	175	23.0	61	29	--	--
19...	1744	146	23.0	53	21	--	--
19...	1805	114	23.0	47	14	--	--
19...	1819	98	23.0	42	11	--	--
19...	1837	82	23.0	39	8.6	--	--
19...	1855	70	23.0	34	6.4	--	--
19...	1913	61	23.0	30	4.9	--	--
19...	1929	57	23.0	29	4.5	--	--
19...	1950	49	23.0	25	3.3	--	--
19...	2010	48	23.0	25	3.2	--	--
26...	1010	40	20.5	3	.36	--	--
26...	1112	47	21.5	12	1.5	--	--
26...	1121	122	21.5	80	26	--	--
26...	1128	195	21.0	146	77	--	--
26...	1138	310	21.5	180	151	--	--
26...	1148	370	21.5	213	213	--	--
26...	1156	405	21.5	211	231	--	--
26...	1207	420	21.0	232	263	--	--
26...	1220	430	20.0	206	239	40	55
26...	1234	450	20.0	234	284	--	--
26...	1248	450	19.5	217	264	--	--
26...	1255	450	19.5	202	245	--	--
26...	1310	450	20.0	179	217	--	--
26...	1344	456	20.5	153	188	--	--
26...	1418	456	20.5	132	163	--	--
26...	1500	456	20.0	114	140	--	--
26...	1523	420	20.5	105	119	--	--
26...	1550	345	20.5	82	76	--	--
26...	1605	295	20.5	71	57	--	--
26...	1622	238	20.5	64	41	--	--

01399780 LAMINGTON (BLACK) RIVER AT BURNT MILLS, NJ--Continued

SEDIMENT DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
JUL							
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
26...	72	83	92	96	96	98	100
26...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
JUL					
26...	1640	193	21.0	49	26
26...	1656	154	21.0	38	16
26...	1712	128	21.0	33	11
26...	1729	106	21.0	27	7.7
26...	1749	84	21.0	23	5.2
26...	1809	70	21.0	19	3.6
26...	1831	60	21.5	16	2.6
26...	1901	52	21.0	15	2.1
26...	2215	37	21.0	21	2.1
SEP					
08...	1245	29	21.0	5	.39

01399900 CHAMBERS BROOK AT NORTH BRANCH DEPOT, NJ

LOCATION.--Lat 40°35'32", long 74°41'00", Somerset County, Hydrologic Unit 02030105, on Station Road in North Branch Depot, 0.3 mi (0.5 km) upstream from mouth, and 3.0 mi (4.8 km) northwest of Raritan.

DRAINAGE AREA.--10.2 mi² (26.4 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1959-64, 1976 to current year.
CHEMICAL ANALYSES: Water years 1959-64, 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
NOV 08...	1300	341	7.5	4.5	1	12.8	--	>24000	1600
FEB 15...	1420	251	7.1	.0	20	14.1	--	1100	920
APR 12...	1310	171	7.3	12.0	4	12.4	3.0	<20	13
MAY 11...	1345	202	8.9	15.0	2	15.4	2.0	80	240
JUN 16...	1415	380	7.8	24.0	1	10.4	3.0	790	49
JUL 21...	1340	345	8.6	26.5	1	9.5	<.5	3500	23
SEP 01...	1315	413	8.0	21.0	5	7.6	--	1100	240

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV 08...	110	28	9.8	20	2.7	22	28	203	13
FEB 15...	71	18	6.3	17	2.9	32	31	152	54
APR 12...	56	14	5.2	11	1.7	32	10	125	0
MAY 11...	68	17	6.1	12	1.5	37	11	149	1
JUN 16...	120	31	9.7	25	2.8	59	32	232	0
JUL 21...	120	31	10	19	3.9	57	21	218	10
SEP 01...	140	38	11	21	3.2	64	25	236	16

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 08...	--	--	--	--	2.0	--	--	--	3.3
FEB 15...	--	--	--	--	2.2	--	.10	--	8.2
APR 12...	--	--	--	--	1.1	--	.05	--	1.0
MAY 11...	--	--	--	--	1.7	--	.01	--	1.5
JUN 16...	--	--	--	--	1.1	--	.03	--	5.5
JUL 21...	.55	.03	.08	.48	.56	1.1	.04	.04	2.9
SEP 01...	.79	.01	.06	.31	.37	1.2	.06	.03	7.3

01399830 NORTH BRANCH RARITAN RIVER AT NORTH BRANCH, NJ

LOCATION.--Lat 40°36'00", long 74°40'27", Somerset County, Hydrologic Unit 02030105, on right bank 5 ft (1.5 m) upstream from bridge on State Highway 28 in North Branch, 0.1 mi (0.16 km) south of River Brook, and 3.6 mi (5.8 km) upstream from confluence with South Branch Raritan River.

DRAINAGE AREA.--174 mi^2 (451 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: July to September 1977.

GAGE.--Water-stage recorder. Datum of gage is 56.942 ft (17.356 m) NGVD.

REMARKS.--Discharge records good. Flow regulated by Round Valley Reservoir.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period July to September, 848 ft^3/s (24.0 m^3/s) Sept. 25, gage height, 4.83 ft (1.472 m); minimum, 27 ft^3/s (0.765 m^3/s) Sept. 12, gage height, 2.77 ft (0.844 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 28, 1971, reached an elevation of 75.6 ft (23.04 m), from high-water mark.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										89	40	43
2										82	58	43
3										73	58	40
4										67	125	37
5										67	67	36
6										67	61	37
7										82	71	37
8										137	97	34
9										94	152	34
10										76	113	34
11										87	170	33
12										105	80	30
13										167	119	30
14										125	143	31
15										69	92	31
16										54	69	34
17										49	67	100
18										47	63	67
19										100	52	50
20										78	47	71
21										65	42	107
22										52	146	67
23										42	107	65
24										40	69	170
25										42	89	548
26										125	67	321
27										43	54	242
28										39	50	161
29										37	49	125
30										39	45	102
31										39	42	---
TOTAL										2278	2504	2760
MEAN										73.5	80.8	92.0
MAX										167	170	548
MIN										37	40	30
CFSM										.42	.46	.53
IN.										.49	.54	.59

01400000 NORTH BRANCH RARITAN RIVER NEAR RARITAN, NJ

LOCATION.--Lat 40°34'10", long 74°40'45", Somerset County, Hydrologic Unit 02030105, on right bank, 400 ft (120 m) upstream from U.S. Highway 202, 1.4 mi (2.3 km) upstream from confluence with South Branch, and 2.7 mi (4.3 km) west of Raritan.

DRAINAGE AREA.--190 mi² (492 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: June 1923 to current year. Monthly discharge only for June 1923, published in WSP 1302. Prior to October 1943, published as "at Milltown".
CHEMICAL ANALYSES: Water years 1963 to November 1975.
SEDIMENT ANALYSES: Water years 1967-73.

REVISED DISCHARGE RECORDS.--WSP 1552: 1924-26, 1928-35.

GAGE.--Water-stage recorder. Concrete control since Sept. 1, 1936. Datum of gage is 50.43 ft (15.371 m) NGVD. Prior to Oct. 17, 1936, nonrecording gage at site 30 ft (9.1 m) downstream at same datum.

REMARKS.--Discharge records excellent. Flow regulated by Round Valley Reservoir.

AVERAGE DISCHARGE.--54 years, 299 ft³/s (8.468 m³/s), 21.37 in/yr (543 mm/yr).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,000 ft³/s (142 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 25	0700	6660	189	9.13	2.783
Mar. 22	2300	*8310	235	9.97	3.039
Apr. 5	0945	5570	158	8.35	2.545

Minimum discharge, 8.8 ft³/s (0.249 m³/s) Dec. 22, gage height, 2.32 ft (0.707 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,900 ft³/s (705 m³/s) Aug. 28, 1971, (gage height, 15.47 ft or 4.715 m, from high-water mark in gage house) from rating curve extended above 15,000 ft³/s (420 m³/s); minimum observed, about 3 ft³/s (0.08 m³/s) Nov. 28, 1930, gage height, 1.72 ft (0.524 m), result of freezeup; minimum daily, 7.5 ft³/s (0.21 m³/s) Sept. 26, 27, 1964.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	119	371	58	108	107	434	356	314	141	94	48	48
2	146	223	73	118	105	335	631	294	195	87	67	48
3	207	195	56	91	77	281	1280	281	141	78	69	44
4	195	183	60	89	77	1150	554	263	112	69	141	41
5	116	172	63	79	73	1540	3520	743	97	69	78	37
6	101	156	63	70	64	660	1370	797	101	69	69	41
7	94	141	652	76	71	518	876	410	136	84	78	41
8	87	132	434	71	73	418	721	328	116	141	108	37
9	342	119	155	73	84	349	582	371	240	101	166	37
10	275	119	176	106	84	307	518	349	573	78	132	39
11	132	116	165	136	79	275	458	294	257	87	189	36
12	108	108	147	111	119	251	426	257	218	132	90	32
13	104	104	166	88	351	1610	386	240	183	183	146	32
14	101	101	74	107	534	1810	349	223	146	141	161	34
15	94	101	106	120	325	775	321	218	128	75	104	34
16	84	101	107	110	200	611	301	201	108	64	81	37
17	78	97	107	97	132	492	281	177	94	59	75	101
18	72	97	97	83	114	554	263	195	94	57	72	72
19	67	94	84	70	111	611	251	371	94	132	62	52
20	128	94	96	69	111	484	240	218	90	90	55	72
21	934	90	123	71	100	434	229	177	156	81	48	112
22	240	87	69	67	79	3060	223	161	108	57	161	72
23	172	78	92	69	123	3020	218	146	94	50	123	67
24	166	69	78	80	610	1190	257	141	87	46	81	183
25	245	69	66	90	3740	899	670	136	307	50	97	573
26	621	69	77	87	842	721	492	132	573	166	78	328
27	275	71	73	90	640	611	922	123	161	55	62	251
28	195	72	76	94	670	545	484	112	123	46	57	166
29	172	91	80	94	---	501	426	101	161	44	55	123
30	156	93	72	94	---	450	349	104	112	46	50	97
31	631	---	90	107	---	410	---	108	---	44	46	---
TOTAL	6457	3613	3835	2815	9695	25306	17954	7985	5146	2575	2849	2887
MEAN	208	120	124	90.8	346	816	598	258	172	83.1	91.9	96.2
MAX	934	371	652	136	3740	3060	3520	797	573	183	189	573
MIN	67	69	56	67	64	251	218	101	87	44	46	32
CFSM	1.10	.63	.65	.48	1.82	4.30	3.15	1.36	.91	.44	.48	.51
IN.	1.26	.71	.75	.55	1.90	4.95	3.52	1.56	1.01	.50	.56	.57

CAL YR 1976	TOTAL	95555	MEAN 261	MAX 4200	MIN 34	CFSM 1.37	IN 18.71
WTR YR 1977	TOTAL	91117	MEAN 250	MAX 3740	MIN 32	CFSM 1.32	IN 17.84

01400010 NORTH BRANCH RARITAN RIVER AT SOUTH BRANCH, NJ

LOCATION.--Lat 40°33'24", long 74°41'19", Somerset County, Hydrologic Unit 02030105, at bridge on Old York Road, 2.7 mi (4.4 km) southeast of Readington, and 400 ft (122 m) upstream from mouth.

DRAINAGE AREA.--190 mi² (492 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
OCT 13...	1200	207	9.0	12.5	3	11.0	1.0	330	23	75	18
NOV 22...	1015	209	8.7	1.5	2	12.2	--	50	49	86	20
APR 12...	1205	176	8.1	12.0	3	12.6	1.0	<20	11	72	18
MAY 11...	1430	178	8.7	15.0	2	14.2	1.0	50	2	68	17
JUN 16...	1500	230	7.9	25.0	1	10.5	1.0	330	<2	73	18
JUL 21...	1230	242	8.5	27.0	1	6.0	<.5	230	23	80	20
SEP 01...	1130	258	7.9	22.0	6	4.7	--	<20	170	90	22

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
OCT 13...	7.2	11	2.4	.6	29	16	11	137	7	--
NOV 22...	8.7	10	1.6	--	25	15	--	137	2	--
APR 12...	6.6	8.9	1.3	--	22	13	--	135	6	--
MAY 11...	6.1	9.5	1.5	--	20	13	8.7	137	3	--
JUN 16...	6.8	12	1.5	--	22	16	--	125	0	--
JUL 21...	7.3	13	2.2	--	21	17	--	137	3	.53
SEP 01...	8.4	13	2.0	--	22	17	--	135	11	.44

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 13...	--	--	--	2.2	410	--	--	--	5.8	4.0
NOV 22...	--	--	--	1.2	--	--	--	--	--	--
APR 12...	--	--	--	.60	--	--	.02	--	1.0	--
MAY 11...	--	--	--	1.5	--	--	.01	--	5.3	--
JUN 16...	--	--	--	1.3	--	--	.04	--	6.0	--
JUL 21...	.01	.12	.65	.77	--	1.3	.08	.04	5.5	--
SEP 01...	.01	.09	.43	.52	--	.97	.11	.06	6.7	--

01400010 NORTH BRANCH RARITAN RIVER AT SOUTH BRANCH, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
OCT 13...	1200	100	70	30	1	9	50	0	0	19	0
MAY 11...	1430	--	--	30	1	--	0	0	--	--	0

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)
OCT 13...	0	0	0	10	280	130	8100	2	43	30
MAY 11...	0	--	0	--	--	140	--	4	--	40

DATE	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT 13...	450	<.5	.0	2	13	0	10	56	4	.0
MAY 11...	--	.0	--	0	--	0	30	--	--	--

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT 13...	2	1.0	.5	2.2	.0	.0	.0	.0	.0	0
MAY 11...	--	--	--	--	--	--	--	--	--	--

01400120 RARITAN RIVER AT RARITAN, NJ

LOCATION.--Lat 40°33'52", long 74°38'10", Somerset County, Hydrologic Unit 02030105, at bridge on South Branch-Raritan Road in Raritan, and 3.5 mi (5.6 km) northeast of South Branch, and 3.6 mi (5.8 km) southeast of North Branch.

DRAINAGE AREA.--474 mi² (1228 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: May to August 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
MAY 05...	1000	205	7.5	15.0	15	9.9	3.0	>24000	>2400
JUN 07...	1400	238	7.6	19.5	8	8.9	<.5	790	17
JUL 21...	1015	238	8.4	27.0	1	8.1	<.5	80	23
AUG 04...	1345	231	7.4	24.5	1	9.3	--	1100	240

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
MAY 05...	70	17	6.7	11	1.9	22	14	108	44
JUN 07...	86	21	8.1	12	1.8	25	15	140	11
JUL 21...	82	20	7.9	11	2.0	24	17	130	12
AUG 04...	84	22	7.0	14	1.9	24	16	145	24

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
MAY 05...	--	--	--	--	1.4	--	.07	--	8.0
JUN 07...	--	--	--	--	1.4	--	.14	--	3.2
JUL 21...	.46	.01	.06	.35	.41	.88	.09	.07	5.3
AUG 04...	.64	.03	.12	.49	.61	1.3	.14	.10	5.4

01400500 RARITAN RIVER AT MANVILLE, NJ

LOCATION.--Lat 40°33'18", long 74°35'02", Somerset County, Hydrologic Unit 02030105, on left bank at downstream side of highway bridge at Manville, and 1.4 mi (2.2 km) upstream from Millstone River.

DRAINAGE AREA.--490 mi² (1,269 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: June 1903 to March 1907 (published as "at Finderne"), August 1908 to April 1915 (gage heights only, published in WSP 521), August 1921 to current year. Monthly discharge only for some periods, published in WSP 1302.
CHEMICAL ANALYSES: Water years 1923-25, 1959, 1962-67, 1976 to current year.
SEDIMENT ANALYSES: Water years 1968-73.

REVISED DISCHARGE RECORDS.--WSP 1552: 1904, 1906, 1922, 1923(M), 1924-25, 1926-29(M), 1930, 1932-33(M), 1924-54. WDR-NJ-75-1: 1964(M), 1969(M), 1970(P), 1971(P), 1972(P), 1973(P).

GAGE.--Water-stage recorder. Datum of gage is 20.61 ft (6.282 m) NGVD. Prior to Aug. 15, 1923, nonrecording gage on downstream side of highway bridge at same site and datum. From Oct. 1, 1952 to Sept. 30, 1966, water-stage recorder at station at Bound Brook, above Calco Dam (station (01403000) used as auxiliary gage when stage is above 5.0 ft (1.52 m). Since Oct. 1, 1966, water-stage recorder at station at Bound Brook, used as auxiliary gage, was moved downstream to present site (station 01403060).

REMARKS.--Discharge records excellent except those above 5,000 ft³/s (142 m³/s) which are fair. Records given herein represent flow at gage only. Slight diurnal fluctuation at low flow. Flow regulated by Spruce Run and Round Valley Reservoirs (see Raritan River Basin, reservoirs in). Diversion to Round Valley Reservoir (see Raritan River Basin, diversions). Water diverted 1,500 ft (457 m) upstream from station and returned to river 0.6 mi (1.0 km) downstream from station by Johns-Manville Corporation (see Raritan River Basin, diversions).

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--59 years, (1903-6, 1921-77), 747 ft³/s (21.16 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10,000 ft³/s (283 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 25	1115	13200	374	14.13	4.307
Mar. 23	0445	*18300	518	16.59	5.057
Apr. 5	1430	11900	337	13.45	4.100

Minimum discharge, 75 ft³/s (2.12 m³/s) Dec. 22, gage height, 3.57 ft (1.088 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,300 ft³/s (1,030 m³/s) Aug. 28, 1971, from rating curve extended above 14,000 ft³/s (396 m³/s) on basis of slope-area measurements at gage heights, 14.9 and 20.42 ft (4.54 and 6.224 m), gage height, 23.8 ft (7.25 m), from floodmark (backwater from Millstone River); minimum daily discharge, 17 ft³/s (0.48 m³/s) Sept. 19, 1964 (does not include water diverted to Johns-Manville Plant).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230	990	150	240	160	1010	872	670	230	190	270	205
2	280	529	195	250	165	773	970	614	426	205	320	225
3	392	424	308	270	170	638	2710	622	265	215	178	225
4	417	380	445	260	170	1550	1410	550	225	200	344	220
5	280	356	290	240	175	3730	8310	1270	182	200	205	220
6	205	338	255	200	170	1530	4780	1590	195	235	162	240
7	178	320	863	210	150	1160	2070	1020	265	275	230	255
8	162	445	1330	230	140	940	1660	791	240	338	186	240
9	543	255	459	220	140	791	1380	800	374	235	210	230
10	881	245	473	300	150	694	1230	845	1050	178	314	225
11	362	235	380	782	180	622	1120	702	638	195	362	220
12	250	225	332	500	558	566	1020	614	410	881	205	205
13	210	215	270	350	1470	818	920	582	314	1220	374	210
14	195	210	260	310	2710	5000	854	574	265	314	529	215
15	170	200	285	320	1400	1920	755	550	240	210	320	225
16	162	190	255	290	881	1430	710	515	215	195	205	250
17	166	186	250	250	746	1150	662	494	182	205	170	374
18	158	186	230	220	574	1210	614	508	210	186	154	302
19	143	182	235	230	374	1430	473	818	215	255	136	225
20	245	182	220	260	338	1130	566	590	240	302	186	296
21	1540	182	285	230	386	1030	550	466	314	280	230	344
22	694	170	345	200	424	4270	536	398	302	235	368	260
23	386	158	445	180	280	12900	522	344	200	230	308	240
24	326	150	404	180	854	3450	566	302	174	240	178	574
25	392	166	362	190	9040	1970	1400	290	290	275	182	1110
26	1020	186	280	190	2490	1620	1020	270	1110	362	174	782
27	728	186	230	180	1360	1360	1980	250	344	186	139	590
28	438	182	250	170	1410	1250	1170	230	270	225	146	445
29	356	200	330	160	---	1180	1020	220	356	225	186	314
30	320	220	260	140	---	1070	773	205	260	215	190	240
31	920	---	270	150	---	990	---	210	---	215	190	---
TOTAL	12749	8093	10946	7902	27065	59182	42623	17904	10001	8922	7351	9706
MEAN	411	270	353	255	967	1909	1421	578	333	288	237	324
MAX	1540	990	1330	782	9040	12900	8310	1590	1110	1220	529	1110
MIN	143	150	150	140	140	566	473	205	174	178	136	205

CAL YR 1976 TOTAL 223752 MEAN 611 MAX 12500 MIN 114
WTR YR 1977 TOTAL 222444 MEAN 609 MAX 12900 MIN 136

01400500 RARITAN RIVER MANVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)
OCT 07...	0945	178	248	7.6	16.0	6	9.7	.9	130	540	--	49
NOV 23...	0915	154	284	7.8	1.0	3	13.8	2.1	88	<20	B72	20
FEB 15...	0930	1560	252	7.3	.0	9	11.8	6.0	B350	22	>600	1600
MAR 29...	0950	1190	189	7.7	8.0	20	12.4	.8	53	2	170	49
MAY 12...	0940	614	210	8.5	15.0	3	11.0	1.5	97	350	B30	8
JUN 16...	0925	220	249	7.5	23.0	1	8.6	1.6	120	50	330	130
JUL 21...	1315	275	234	8.6	30.5	1	10.4	2.7	--	230	--	80
AUG 11...	0925	419	219	7.9	25.5	1	7.7	2.6	--	2400	--	790

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT 07...	76	21	19	7.0	12	2.0	67	0	55	2.7	28	17
NOV 23...	96	32	23	9.4	13	1.7	78	0	64	2.0	29	19
FEB 15...	64	32	16	5.9	17	3.6	39	0	32	3.1	22	32
MAR 29...	62	28	15	6.0	10	1.7	41	0	34	1.3	23	15
MAY 12...	75	40	19	6.7	11	1.5	43	0	35	.2	23	15
JUN 16...	81	29	21	7.0	13	1.7	63	0	52	3.2	27	17
JUL 21...	81	23	20	7.6	11	2.0	63	4	58	.3	24	15
AUG 11...	80	18	20	7.3	10	2.3	76	0	62	1.5	20	15

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 07...	140	7	--	--	--	--	1.1	--	.20	--	--
NOV 23...	142	2	--	--	--	--	1.3	--	.12	--	4.2
FEB 15...	150	23	--	--	--	--	2.5	--	.17	--	7.5
MAR 29...	114	0	--	--	--	--	1.4	--	.04	--	--
MAY 12...	112	3	--	--	.04	.25	.29	1.0	.07	--	7.1
JUN 16...	145	0	--	--	--	--	1.1	--	.09	--	5.4
JUL 21...	124	9	.29	.01	.06	.23	.29	.59	.10	.07	6.1
AUG 11...	138	11	.59	.02	.05	.52	.57	1.2	.15	.11	5.2

01400560 MILLSTONE RIVER AT APPLEGARTH, NJ

LOCATION.--Lat 40°16'28", long 74°28'22", Middlesex County, Hydrologic Unit 02030105, at bridge on Prospect Plains-Applegarth Road, 0.3 mi (0.5 km) south of Applegarth, 2.7 mi (4.3 km) east of Hightstown, and 5.2 mi (8.4 km) upstream from Rocky Brook.

DRAINAGE AREA.--15.0 mi^2 (38.8 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1960-62, 1964, 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 12...	0900	135	6.9	9.0	5	8.2	1.1	100	110	--	350	36
NOV 17...	0900	116	6.2	2.0	6	11.7	1.7	828	20	100	170	31
FEB 16...	0930	141	5.6	.0	3	11.8	.3	84	<2	--	350	39
MAR 28...	1000	131	5.2	7.0	4	10.6	1.1	<1	<2	33	22	39
MAY 11...	0920	115	6.2	10.0	4	10.5	.7	54	--	110	--	33
JUN 14...	0925	122	6.1	18.5	10	8.0	.9	220	130	860	80	33
JUL 18...	0920	97	6.3	25.0	7	4.8	1.4	--	920	--	>2400	27
AUG 09...	0915	103	6.8	22.5	8	6.2	.7	--	920	--	1600	32
SEP 27...	0915	153	5.5	17.0	7	7.3	1.2	--	4	--	>2400	41

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT 12...	26	7.5	4.1	4.4	3.3	12	0	10	2.4	25	11	83
NOV 17...	27	6.7	3.4	4.2	3.0	5	0	4	5.0	23	9.1	77
FEB 16...	37	9.0	4.0	5.6	2.7	2	0	2	8.0	32	12	84
MAR 28...	37	9.1	3.9	4.9	2.6	2	0	2	20	29	10	75
MAY 11...	28	7.1	3.6	4.8	2.4	6	0	5	6.1	22	10	97
JUN 14...	27	7.4	3.6	5.0	2.6	7	0	6	8.9	22	10	72
JUL 18...	15	5.6	3.1	4.7	2.2	15	0	12	12	11	9.4	65
AUG 09...	18	7.3	3.4	5.0	2.8	17	0	14	4.3	17	9.7	82
SEP 27...	37	10	3.9	5.0	3.5	5	0	4	25	35	11	83

DATE	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 12...	3	--	--	--	--	1.0	--	--	.04	--	3.1
NOV 17...	31	--	--	--	--	1.3	--	--	.08	--	2.0
FEB 16...	0	--	--	--	--	1.4	--	--	.03	--	5.6
MAR 28...	1	--	--	--	--	1.5	--	--	.05	--	--
MAY 11...	9	--	--	--	--	--	--	--	--	--	4.3
JUN 14...	8	--	--	--	--	.80	--	--	.01	--	7.0
JUL 18...	20	.40	.00	.14	.52	.66	--	1.1	.11	.02	8.5
AUG 09...	10	.46	.00	13	.73	.86	--	1.3	.11	.04	6.2
SEP 27...	4	1.0	.00	.07	.33	.40	26000	1.4	.05	.01	9.1

01400560 MILLSTONE RIVER AT APPLEGARTH, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)
SEP 27...	0915	35	<10	<10	<10	<10	13000	22	70	.0	<10	50

DATE	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
SEP 27...	0	.0	0	120	67	34	17	.8	.0	.6	.0	0

01400650 MILLSTONE RIVER AT GROVERS MILL, NJ

LOCATION.--Lat 40°19'19", long 74°36'31", Mercer County, Hydrologic Unit 02030105, at bridge on Millstone Road, 0.3 mi (0.5 km) upstream from confluence with Cranbury Brook, and 2.7 mi (4.4 km) north of Dutch Neck.

DRAINAGE AREA.--43.4 mi² (112.4 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 18...	0900	215	6.5	4.5	2	7.5	2.3	B130	31	80	8	46
FEB 17...	1030	205	6.6	.0	--	10.4	2.1	B1000	<2	120	110	--
MAR 30...	0945	177	6.9	14.5	10	7.8	4.7	86	2	59	240	49
MAY 24...	0925	234	6.6	22.0	10	3.2	14	520	240	720	79	45
JUN 15...	0935	188	6.3	21.0	2	3.6	4.2	370	94	580	27	51
JUL 21...	0925	216	6.3	26.0	1	2.8	2.0	--	490	--	240	45
AUG 10...	0930	195	6.5	22.5	2	3.2	1.0	--	240	--	350	48

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 18...	28	10	5.0	15	4.2	22	0	18	11	25	20
FEB 17...	--	--	--	--	--	15	0	12	173	--	--
MAR 30...	35	12	4.7	13	3.4	17	0	14	3.4	28	20
MAY 24...	12	10	4.9	18	4.2	40	0	33	16	20	23
JUN 15...	35	13	4.4	13	3.3	20	0	16	16	24	18
JUL 21...	19	10	4.8	18	4.0	32	0	26	26	17	21
AUG 10...	28	11	4.9	15	3.9	24	0	20	12	28	20

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 18...	111	2	--	--	--	--	1.7	--	.59	--	3.0
FEB 17...	--	--	--	--	--	--	2.5	--	.21	--	--
MAR 30...	108	31	--	--	--	--	2.8	--	.25	--	--
MAY 24...	121	60	--	--	--	--	1.8	--	.46	--	7.1
JUN 15...	121	1	--	--	--	--	1.5	--	.42	--	6.1
JUL 21...	131	11	4.1	.13	.76	1.2	2.0	6.2	.52	.34	4.6
AUG 10...	114	6	2.2	.04	.31	.64	.95	3.2	.35	.27	5.3

01400725 CRANBURY BROOK AT PLAINSBORO, NJ

LOCATION.--Lat 40°19'34", long 74°36'11", Middlesex County, Hydrologic Unit 02030105, at bridge on Edgemere Road in Plainsboro, at outflow of Plainsboro Pond, and 3.1 mi (5.0 km) northeast of Dutch Neck.

DRAINAGE AREA.--22.1 mi² (57.2 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 12...	1215	167	7.1	14.5	12	7.2	1.7	420	130	--	350	43
NOV 18...	1000	206	6.9	4.0	1	13.0	2.2	B140	<2	B32	<2	53
FEB 17...	1130	208	6.3	.0	8	9.4	3.5	B1500	<2	40	8	45
MAR 30...	1025	117	6.6	11.5	40	10.4	1.6	B23	2	B21	49	33
MAY 24...	1015	150	7.1	24.0	3	9.2	2.5	57	49	50	2	78
JUN 15...	1015	139	7.6	22.0	1	11.2	3.0	280	5	210	49	44
JUL 21...	1000	135	6.7	28.0	2	8.6	7.5	--	5400	--	23	33
AUG 10...	1015	130	7.4	25.5	1	8.2	1.9	--	240	--	17	41

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT 12...	23	9.5	4.7	7.6	4.3	24	0	20	3.1	18	16
NOV 18...	39	12	5.5	9.9	6.0	17	0	14	3.4	25	18
FEB 17...	37	10	4.8	13	4.9	10	0	8	8.0	27	24
MAR 30...	29	7.6	3.3	5.1	3.0	5	0	4	2.0	22	9.1
MAY 24...	63	19	7.3	7.8	3.1	18	0	15	2.3	20	15
JUN 15...	27	10	4.7	6.6	2.5	21	0	17	.8	16	13
JUL 21...	21	7.8	3.3	6.2	5.4	15	0	12	4.8	19	12
AUG 10...	18	10	4.0	5.5	5.0	28	0	23	1.8	15	12

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 12...	94	3	--	--	--	--	.80	--	.05	--	4.4
NOV 18...	90	3	--	--	--	--	1.4	--	.03	--	3.6
FEB 17...	123	0	--	--	--	--	2.8	--	.10	--	4.3
MAR 30...	77	27	--	--	--	--	2.0	--	.09	--	--
MAY 24...	98	5	--	--	--	--	1.4	--	.04	--	6.0
JUN 15...	88	0	--	--	--	--	1.4	--	.02	--	5.4
JUL 21...	76	9	.44	.02	.48	1.2	1.7	2.2	.09	.01	5.2
AUG 10...	87	1	.06	.00	.04	.65	.69	.75	.06	.01	5.0

01400806 BEAR BROOK AT GROVERS MILL, NJ

LOCATION.--Lat 40°18'53", long 74°36'32", Mercer County, Hydrologic Unit 02030105, at bridge 30 ft (9 m) downstream from outflow of lake at Grovers Mill, and 2.2 mi (3.6 km) north of Dutch Neck.

DRAINAGE AREA.--11.8 mi² (30.6 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM, .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 12...	1250	214	7.3	14.0	6	9.5	1.6	72	49	--	13	49
NOV 18...	0830	203	7.2	4.0	1	13.8	1.8	52	<2	44	5	61
FEB 17...	0930	224	6.6	2.0	6	13.6	2.7	8860	49	240	220	48
MAR 30...	0855	159	6.6	15.0	15	12.2	1.9	84	5	85	5	53
MAY 24...	0825	183	7.9	23.0	2	9.6	2.6	110	79	480	17	58
JUN 15...	0850	194	7.2	21.5	1	10.2	1.8	110	26	1000	14	62
JUL 21...	0845	151	6.7	28.0	1	8.1	6.9	--	20	--	230	50
AUG 10...	0900	169	7.0	25.0	0	8.4	2.4	--	110	--	11	58

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT 12...	34	11	5.2	5.6	4.3	18	0	15	1.4	13	34
NOV 18...	47	13	7.0	7.7	3.8	17	0	14	1.7	17	23
FEB 17...	36	11	4.9	17	3.9	15	0	12	6.0	19	34
MAR 30...	44	13	5.0	9.0	2.8	11	0	9	4.4	20	18
MAY 24...	34	12	6.9	9.2	3.5	29	0	24	.6	12	23
JUN 15...	47	17	4.8	7.3	2.5	18	0	15	1.8	12	32
JUL 21...	25	12	4.8	6.5	3.2	30	0	25	9.6	11	18
AUG 10...	38	16	4.5	6.8	3.3	24	0	20	3.8	14	26

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 12...	119	6	--	--	--	--	.80	--	.03	--	4.9
NOV 18...	111	1	--	--	--	--	1.1	--	.01	--	2.2
FEB 17...	131	0	--	--	--	--	1.7	--	.08	--	8.5
MAR 30...	107	7	--	--	--	--	2.0	--	.07	--	--
MAY 24...	140	0	--	--	--	--	1.4	--	.03	--	5.6
JUN 15...	159	0	--	--	--	--	1.1	--	.01	--	6.0
JUL 21...	95	7	.21	.02	.39	.91	1.3	1.5	.11	.03	7.1
AUG 10...	143	5	.48	.01	.05	1.1	1.1	1.6	.05	.01	5.7

01400831 DEVILS BROOK NEAR PRINCETON JUNCTION, NJ

LOCATION.--Lat 40°20'00", long 74°36'44", Middlesex County, Hydrologic Unit 02030105, at bridge on Princeton-Cranbury Road, just upstream from inflow to Gordon Pond, and 3.5 mi (5.7 km) north of Dutch Neck.

DRAINAGE AREA.--18.9 mi² (49.0 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 07...	1240	155	7.4	15.5	2	8.4	2.2	88	11	--	33	48
NOV 18...	1045	149	7.0	4.0	1	13.8	2.4	B14	<2	B16	2	48
FEB 17...	1230	165	6.4	.5	3	10.6	1.5	B1100	6	44	33	46
MAR 30...	1110	104	6.6	15.0	4	8.5	1.0	40	49	B17	11	38
MAY 24...	1045	150	7.3	22.0	3	8.4	2.1	B610	240	B75	<2	76
JUN 15...	1115	136	7.1	14.5	1	11.1	1.8	380	5	290	79	42
JUL 21...	1035	130	6.6	26.0	1	7.2	4.5	--	240	--	33	38
AUG 10...	1100	107	8.0	24.0	1	10.4	4.7	--	350	--	240	38

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT 07...	21	10	5.6	6.6	2.1	33	0	27	2.1	12	12
NOV 18...	28	11	5.1	6.8	1.9	24	0	20	3.8	12	11
FEB 17...	37	10	5.2	7.2	2.8	11	0	9	7.0	29	12
MAR 30...	30	9.2	3.6	5.2	1.8	10	0	8	4.0	17	8.3
MAY 24...	54	21	5.7	8.3	2.4	27	0	22	2.2	14	13
JUN 15...	22	9.6	4.4	7.2	1.8	24	0	20	3.1	15	11
JUL 21...	20	8.3	4.1	7.0	2.3	22	0	18	8.8	15	9.9
AUG 10...	18	8.7	4.0	6.5	2.5	24	0	20	.4	14	10

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 07...	87	4	--	--	--	--	1.4	--	.02	--	1.7
NOV 18...	89	4	--	--	--	--	1.7	--	.04	--	2.2
FEB 17...	105	0	--	--	--	--	1.7	--	.07	--	7.2
MAR 30...	74	4	--	--	--	--	1.7	--	.03	--	--
MAY 24...	98	4	--	--	--	--	1.5	--	.12	--	5.9
JUN 15...	111	2	--	--	--	--	2.0	--	.03	--	4.7
JUL 21...	84	8	1.4	.03	.18	.92	1.1	2.5	.10	.02	5.8
AUG 10...	86	8	1.3	.02	.01	.99	1.0	2.3	.08	.01	6.1

01400834 MILLSTONE RIVER AT PENNS NECK, NJ

LOCATION.--Lat 40°20'19", long 74°37'47", Mercer County, Hydrologic Unit 02030105, at bridge on U.S. Route 1, and 4.0 mi (6.4 km) northeast of Clarksville.

DRAINAGE AREA.--99.9 mi² (258.7 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 17...	1300	212	7.0	4.5	2	10.6	2.2	64	33	812	22	49
FEB 16...	1400	201	6.5	1.0	5	11.0	2.3	62	<2	--	8	47
MAR 28...	1420	161	6.4	8.0	70	11.6	1.6	94	11	39	17	42
MAY 11...	1330	174	6.8	14.0	6	8.2	3.3	B110	--	34	--	48
JUN 14...	1240	168	6.6	23.5	2	7.4	2.8	B180	130	180	17	47
JUL 18...	1230	167	6.5	27.5	1	7.8	3.7	--	1300	--	80	43
AUG 09...	1210	157	6.8	27.0	2	7.4	2.0	--	200	--	240	43
SEP 27...	1230	231	6.3	17.5	5	4.9	1.0	--	4	--	920	41

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 17...	31	11	5.3	13	4.0	22	0	18	3.5	25	20
FEB 16...	37	11	4.7	14	4.1	12	0	10	6.1	28	25
MAR 28...	33	9.4	4.4	9.3	3.2	11	0	9	7.0	25	15
MAY 11...	30	11	5.0	13	3.5	22	0	18	5.6	21	19
JUN 14...	32	11	4.8	10	2.8	18	0	15	7.2	25	18
JUL 18...	25	10	4.4	9.8	3.4	22	0	18	11	19	16
AUG 09...	21	10	4.4	9.3	3.6	27	0	22	6.8	21	15
SEP 27...	27	10	4.0	10	4.2	17	0	14	14	21	18

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 17...	117	8	--	--	--	--	1.4	--	.33	--	3.0
FEB 16...	116	6	--	--	--	--	2.8	--	.12	--	5.3
MAR 28...	91	18	--	--	--	--	2.0	--	.18	--	--
MAY 11...	131	11	--	--	--	--	--	--	--	--	6.1
JUN 14...	96	1	--	--	--	--	1.1	--	.04	--	6.2
JUL 18...	98	4	1.4	.02	.15	.61	.76	2.2	.18	.07	8.2
AUG 09...	108	6	.90	.02	.08	.85	.93	1.9	.22	.12	6.1
SEP 27...	101	0	.91	.01	.04	.39	.43	1.4	.13	.09	10

01400985 STONY BROOK AT PROVINCE LINE ROAD NEAR PRINCETON, NJ

LOCATION.--Lat 40°21'09", long 74°42'39", Mercer County, Hydrologic Unit 02030105, at bridge on Province Line Road, 1.2 mi (1.9 km) northeast of Rosedale, and 1.3 mi (2.1 km) southwest of Cedar Grove.

DRAINAGE AREA.--36.2 mi² (93.8 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM .7UM-MF (COL./100 ML)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREP-TOCOCCI (MPN)	HARD-NESS (CA,MG) (MG/L)
OCT 07...	0835	331	7.7	16.0	5	5.9	1.8	35	23	--	240	92
NOV 22...	0930	289	7.9	2.0	2	14.0	1.6	B36	5	100	<2	92
MAR 02...	0900	201	7.1	3.0	7	13.6	1.5	B26	170	B570	240	58
APR 12...	0845	161	7.6	13.0	6	12.4	1.6	59	<2	1200	17	80
MAY 23...	0930	262	7.4	20.5	2	7.6	2.5	77	49	1300	70	90
JUN 20...	1115	276	8.2	24.0	2	10.9	2.6	B74	49	1100	<20	85
JUL 13...	0930	296	7.7	24.5	1	7.8	1.7	--	9200	--	2200	93
AUG 09...	1355	247	9.1	28.0	1	12.6	2.2	--	23	--	49	73
SEP 27...	1440	250	7.9	10.0	3	9.8	1.6	--	8	--	170	75

DATE	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
OCT 07...	23	21	9.6	27	3.1	84	0	69	2.7	23	44
NOV 22...	31	21	9.6	16	2.6	74	0	61	1.5	34	25
MAR 02...	37	13	6.2	12	2.5	26	0	21	3.3	29	23
APR 12...	57	21	6.6	9.7	1.8	28	0	23	1.1	27	13
MAY 23...	35	20	9.7	17	2.7	67	0	55	4.3	29	24
JUN 20...	29	20	8.5	18	2.8	68	0	56	.7	28	27
JUL 13...	27	22	9.2	19	2.2	81	0	66	2.6	18	31
AUG 09...	20	18	6.9	18	3.9	59	3	53	.1	25	22
SEP 27...	19	18	7.2	17	3.2	68	0	56	1.4	23	21

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 07...	183	3	--	--	--	--	1.4	--	.16	--	5.7
NOV 22...	157	2	--	--	--	--	1.4	--	.04	--	3.1
MAR 02...	141	10	--	--	--	--	1.4	--	.06	--	6.0
APR 12...	131	8	--	--	--	--	1.5	--	.04	--	2.2
MAY 23...	144	7	--	--	--	--	1.4	--	.07	--	5.8
JUN 20...	159	0	--	--	--	--	1.3	--	.03	--	5.6
JUL 13...	176	20	.08	.00	.08	.32	.40	.48	.06	.03	5.8
AUG 09...	156	1	.31	.00	.02	.97	.99	1.3	.27	.22	6.1
SEP 27...	138	0	.64	.01	.03	.46	.49	1.1	.11	.07	8.7

01401000 STONY BROOK AT PRINCETON, NJ

LOCATION.--Lat 40°19'59", long 74°40'56", Mercer County, Hydrologic Unit 02030105, at bridge on U.S. Highway 206, 1.6 mi (2.6 km) southwest of Princeton, and 4.0 mi (6.4 km) upstream from Lake Carnegie.

DRAINAGE AREA.--44.5 mi^2 (115 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1954 to current year.
CHEMICAL ANALYSES: Water years 1959-68, 1970 to November 1975.
SEDIMENT ANALYSES: Water years 1956-73.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: October 1953 to current year.
WATER TEMPERATURES: October 1956 to September 1962, October 1963 to September 1964, October 1965 to June 1970.
SUSPENDED-SEDIMENT DISCHARGE: January 1956 to June 1970.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 62.23 ft (18.968 m) NGVD (levels from New Jersey Geological Survey bench mark).

REMARKS.--Discharge records poor. Since July 1959 some regulation by several small reservoirs, combined capacity, 49,800,000 gal (188,500 m^3).

AVERAGE DISCHARGE.--24 years, 62.1 ft^3/s (1.759 m^3/s), 18.95 in/yr (481 mm/yr), unadjusted.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,800 ft^3/s (51.0 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 22	2330	2370	67.1	7.59	2.313
Apr. 5	0645	*2890	81.8	8.41	2.563

Minimum daily discharge, 1.6 ft^3/s (0.045 m^3/s) Sept. 13.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,960 ft^3/s (254 m^3/s) Aug. 28, 1971 (gage height, 14.26 ft or 4.346 m) from rating curve extended above 4,000 ft^3/s (110 m^3/s) on basis of contracted-opening measurement of peak flow; no flow many days in August and September 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	72	6.0	7.0	6.4	87	34	38	2.0	2.7	15	3.8
2	9.4	29	5.8	6.8	6.2	65	81	32	8.0	2.5	49	3.3
3	7.7	21	5.4	6.6	6.0	53	260	30	5.0	2.1	34	3.0
4	8.0	18	5.2	6.5	5.9	153	91	26	3.5	2.0	10	2.5
5	5.7	16	5.0	6.3	5.8	322	1310	83	2.0	1.9	6.4	2.4
6	4.3	14	6.0	6.2	5.6	118	272	56	10	1.8	7.5	2.4
7	3.7	13	37	6.0	5.4	81	128	43	8.0	1.7	8.4	2.3
8	3.1	12	87	5.9	5.3	65	95	29	6.0	7.6	5.0	2.1
9	69	11	24	5.8	5.2	53	72	29	35	4.5	3.5	2.0
10	47	9.6	18	22	5.1	47	61	26	72	3.0	8.5	2.0
11	15	8.5	14	64	7.4	42	55	21	26	15	9.0	2.0
12	10	8.0	12	39	56	38	49	17	11	200	5.0	1.8
13	7.0	7.5	11	26	156	196	42	16	7.0	80	45	1.6
14	4.7	7.2	10	21	169	392	35	13	5.2	25	25	2.0
15	4.9	7.0	9.4	22	109	133	30	11	4.5	12	12	2.3
16	4.7	6.8	8.8	19	70	89	27	10	3.7	9.0	9.0	4.0
17	4.0	6.6	8.2	16	45	65	24	9.8	3.2	7.0	7.5	6.8
18	3.5	6.4	7.8	14	29	109	22	9.4	3.5	6.0	6.6	4.0
19	3.3	6.2	7.5	13	27	133	21	11	3.2	5.0	6.0	6.4
20	5.8	6.0	11	12	27	74	18	9.8	6.0	8.0	5.0	4.5
21	101	5.8	22	11	26	78	17	8.6	11	4.0	4.7	3.5
22	35	5.7	14	10	21	820	17	7.2	3.7	3.6	26	3.0
23	17	5.7	15	9.4	29	526	17	6.9	3.0	3.2	11	4.5
24	13	5.4	11	8.6	131	162	20	6.1	2.8	2.9	10	12
25	16	5.2	9.8	8.2	715	104	63	5.9	5.0	7.0	8.0	38
26	35	5.0	9.0	7.6	156	81	61	5.2	6.0	11	6.0	31
27	33	5.0	8.5	7.4	106	66	233	4.8	3.4	4.0	4.5	14
28	18	6.6	8.0	7.2	153	58	72	4.6	3.0	2.7	4.0	15
29	14	14	7.8	7.0	---	55	87	3.7	12	2.5	3.7	13
30	12	9.0	7.5	6.7	---	49	50	3.1	3.0	2.3	3.3	13
31	160	---	7.2	6.5	---	43	---	2.9	---	2.1	3.5	---
TOTAL	687.8	353.2	418.9	414.7	2089.3	4357	3364	579.0	277.7	442.1	362.1	208.2
MEAN	22.2	11.8	13.5	13.4	74.6	141	112	18.7	9.26	14.3	11.7	6.94
MAX	160	72	87	64	715	820	1310	83	72	200	49	38
MIN	3.1	5.0	5.0	5.8	5.1	38	17	2.9	2.0	1.7	3.3	1.6
CFSM	.50	.27	.30	.30	1.68	3.17	2.52	.42	.21	.32	.26	.16
IN.	.57	.30	.35	.35	1.75	3.64	2.81	.48	.23	.37	.30	.17

CAL YR 1976 TOTAL 15246.19 MEAN 41.7 MAX 1100 MIN .69 CFSM .94 IN 12.74
WTR YR 1977 TOTAL 13554.00 MEAN 37.1 MAX 1310 MIN 1.6 CFSM .83 IN 11.33

01401230 STONY BROOK AT ALEXANDER ROAD AT PRINCETON, NJ

LOCATION.--Lat 40°19'56", long 74°39'14", Mercer County, Hydrologic Unit 02030105, at bridge on Alexander Road, 2.8 mi (4.6 km) northwest of Clarksville, and 0.8 mi (1.3 km) west of traffic circle at intersection of Washington Road and U. S. Route 1 at Penns Neck.

DRAINAGE AREA.--55.4 mi^2 (143.5 km^2), includes 7.0 mi^2 (18.1 km^2) which drains into Delaware and Raritan Canal.

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./ 100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT												
07...	1320	263	7.3	15.5	4	4.2	2.1	872	11	--	540	73
NOV												
17...	1345	280	7.5	3.5	2	11.0	1.5	868	8	824	2	86
MAR												
02...	1330	209	7.1	3.5	8	13.4	.5	8130	140	280	22	57
30...	1415	178	7.2	15.5	7	9.2	1.2	41	8	26	4	53
MAY												
11...	1415	202	7.2	13.0	4	10.0	1.8	97	--	820	--	66
JUN												
14...	1325	210	7.1	22.0	4	8.6	3.3	170	170	280	50	67
JUL												
18...	1320	276	6.9	27.0	1	4.0	1.7	--	33	--	350	76
AUG												
09...	1250	216	7.1	25.5	1	4.6	3.0	--	17	--	27	62
SEP												
27...	1310	304	7.2	16.5	5	6.8	1.6	--	14	--	110	85

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT												
07...	18	17	7.4	18	3.2	67	0	55	5.4	.6	24	28
NOV												
17...	33	20	8.8	16	2.7	65	0	53	3.3	--	34	23
MAR												
02...	35	13	6.0	12	2.5	27	0	22	3.4	--	29	21
30...	29	12	5.5	10	2.0	29	0	24	2.9	--	29	14
MAY												
11...	20	16	6.4	12	2.1	56	0	46	5.7	.0	28	15
JUN												
14...	--	16	6.5	14	2.4	--	0	--	--	--	24	17
JUL												
18...	26	19	7.0	19	2.9	61	0	50	12	--	25	29
AUG												
09...	14	15	5.9	13	3.0	59	0	48	7.5	--	20	18
SEP												
27...	23	21	8.0	23	3.0	76	0	62	7.7	--	22	35

DATE	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT												
07...	4.7	147	7	--	--	--	--	1.1	--	.07	--	5.0
NOV												
17...	--	151	11	--	--	--	--	1.4	--	.07	--	3.6
MAR												
02...	--	140	6	--	--	--	--	1.4	--	.07	--	5.8
30...	--	116	8	--	--	--	--	1.8	--	--	--	--
MAY												
11...	8.8	131	6	--	--	--	--	--	--	--	--	3.2
JUN												
14...	--	135	2	--	--	--	--	.80	--	.02	--	5.4
JUL												
18...	--	138	6	.40	.02	.25	.37	.62	1.0	.13	.07	6.3
AUG												
09...	--	136	9	.43	.03	.20	.59	.79	1.3	.16	.09	6.0
SEP												
27...	--	166	8	.41	.01	.11	.44	.55	.97	.11	.07	9.3

01401230 STONY BROOK AT ALEXANDER ROAD AT PRINCETON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	DIS-SOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
OCT									
07...	1320	120	10	1	80	0	0	1	10
MAY									
11...	1415	--	20	1	0	0	0	0	0

DATE	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
OCT									
07...	370	50	9	90	<.5	2	0	10	--
MAY									
11...	--	60	7	50	.0	4	0	20	0

01401400 HEATHCOTE BROOK AT KINGSTON, NJ

LOCATION.--Lat 40°22'10", long 74°36'59", Middlesex County, Hydrologic Unit 02030105, at bridge on Mapleton Road, 0.3 mi (0.4 km) east of Delaware and Raritan Canal at Kingston, and 3.8 mi (6.1 km) northwest of Scotts Corners.

DRAINAGE AREA.--9.0 mi² (23.3 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)
OCT 07...	1150	299	7.1	15.0	2	7.8	1.5	330	1300	--
NOV 18...	1145	211	6.8	6.0	2	12.0	1.3	330	270	150
FEB 17...	1330	268	6.5	1.0	4	10.9	1.0	560	4	72
MAR 30...	1145	242	6.9	15.5	3	10.7	.8	52	33	41
MAY 24...	1120	289	6.8	18.5	2	8.6	1.3	430	350	1000
JUN 15...	1150	294	6.6	17.0	2	7.9	.6	730	<200	1800
JUL 21...	1115	286	6.8	22.0	1	7.8	.9	--	330	--
AUG 10...	1145	160	6.9	20.0	1	7.2	.5	--	1700	--

DATE	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
OCT 07...	3500	110	83	32	6.1	10	2.9	33	0	27
NOV 18...	20	64	42	16	5.8	10	2.5	27	0	22
FEB 17...	79	75	63	18	7.2	14	2.2	15	0	12
MAR 30...	240	79	63	22	5.9	11	2.1	19	0	16
MAY 24...	170	100	72	25	9.9	12	2.6	34	0	28
JUN 15...	220	100	76	25	9.3	13	2.5	29	0	24
JUL 21...	130	99	72	26	8.3	12	2.4	33	0	27
AUG 10...	790	53	27	13	4.9	8.7	2.4	32	0	26

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)
OCT 07...	4.2	.6	74	12	12	185	1	--	--
NOV 18...	6.8	--	29	13	--	123	4	--	--
FEB 17...	7.6	--	56	23	--	157	10	--	--
MAR 30...	3.8	--	61	12	--	155	19	--	--
MAY 24...	8.6	.3	66	13	10	196	0	--	--
JUN 15...	12	--	78	13	--	201	3	--	--
JUL 21...	8.4	--	67	12	--	184	7	3.8	.00
AUG 10...	6.4	--	21	11	--	232	10	3.5	.01

01401400 HEATHCOTE BROOK AT KINGSTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 07...	--	--	--	320	--	--	--	1.7	2.9
NOV 18...	--	--	1.4	--	--	.02	--	2.0	--
FEB 17...	--	--	1.4	--	--	.05	--	7.6	--
MAR 30...	--	--	1.7	--	--	.02	--	--	--
MAY 24...	--	--	1.4	--	--	.03	--	6.3	--
JUN 15...	--	--	1.3	--	--	.02	--	5.0	--
JUL 21...	.04	.35	.39	--	4.2	.01	.00	5.3	--
AUG 10...	.01	.29	.30	--	3.8	.01	.01	4.3	--

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)
OCT 07...	1150	30	20	1	2	10	0	0	13	0	1
MAY 24...	1120	--	0	2	--	30	0	--	--	0	0

DATE	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)
OCT 07...	1	10	10	180	40	4100	3	9	30	210
MAY 24...	--	3	--	--	60	--	4	--	60	--

DATE	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT 07...	<.5	.0	2	0	0	20	20	--	7	.0
MAY 24...	.0	--	3	--	0	50	--	1	--	--

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT 07...	22	11	9.5	28	9.3	.0	.0	.1	.0	0
MAY 24...	--	--	--	--	--	--	--	--	--	--

01401440 MILLSTONE RIVER AT KINGSTON, NJ

LOCATION.--Lat 40°22'24", long 74°37'15", Middlesex County, Hydrologic Unit 02030105, at bridge on Lincoln Highway, 0.2 mi (0.4 km) downstream from the outflow of Carnegie Lake, and 3.0 mi (4.9 km) northwest of Plainsboro.

DRAINAGE AREA.--172 mi² (445 km²), includes 8.0 mi² (20.7 km²) which drains into Delaware and Raritan Canal.

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 07...	1100	198	7.5	16.5	7	9.8	3.3	92	49	--	350	50
NOV 18...	1230	210	7.8	5.0	3	13.9	4.2	B380	20	818	<2	61
MAR 02...	1215	153	6.7	4.0	4	12.6	2.4	76	79	410	49	56
30...	1305	163	6.9	13.0	20	10.6	1.6	B30	33	29	4	44
MAY 24...	1225	192	9.1	26.0	8	8.9	3.5	B93	20	380	20	65
JUN 15...	1230	184	9.2	23.0	3	9.8	5.0	670	7	300	170	54
JUL 21...	1150	153	7.7	29.5	1	7.3	6.0	--	79	--	130	42
AUG 10...	1215	162	8.7	26.0	1	8.3	4.0	--	350	--	79	47

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT 07...	20	11	5.4	13	3.6	37	0	30	1.9	19	20
NOV 18...	37	14	6.2	12	3.8	29	0	24	.7	28	20
MAR 02...	44	13	5.6	8.7	3.3	15	0	12	4.8	24	16
30...	31	10	4.6	9.4	2.6	16	0	13	3.2	26	15
MAY 24...	35	16	6.0	13	2.8	32	2	30	.0	24	19
JUN 15...	25	13	5.3	12	2.9	27	4	29	.0	20	19
JUL 21...	16	10	4.2	8.7	3.3	32	0	26	1.0	19	13
AUG 10...	19	11	4.8	11	3.7	32	1	28	.1	21	17

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 07...	110	13	--	--	--	--	--	--	--	--	6.5
NOV 18...	109	10	--	--	--	--	1.7	--	.10	--	4.6
MAR 02...	102	26	--	--	--	--	2.0	--	.21	--	9.9
30...	104	13	--	--	--	--	2.0	--	.07	--	--
MAY 24...	104	9	--	--	--	--	1.5	--	.07	--	6.0
JUN 15...	100	13	--	--	--	--	1.5	--	.02	--	6.3
JUL 21...	85	19	.04	.00	.22	.88	1.1	1.1	.09	.01	7.2
AUG 10...	109	10	.05	.00	.06	1.1	1.2	1.3	.10	.01	4.7

01401600 BEDEN BROOK NEAR ROCKY HILL, NJ

LOCATION.--Lat 40°24'52", long 74°39'02", Somerset County, Hydrologic Unit 02030105, at bridge on U.S. Route 206 at State Route 533, 0.7 mi (1.1 km) upstream from Pike Run, 1.2 mi (1.9 km) northwest of Rocky Hill, and 4.6 mi (7.4 km) north of Princeton.

DRAINAGE AREA.--27.6 mi² (71.5 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1967 to current year.
CHEMICAL ANALYSES: Water years 1959-63, 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN mehtod were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURF (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM .7UM-MF (COL./100 ML)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREP-TOCOCCI (MPN)	HARD-NESS (CA,MG) (MG/L)
OCT 07...	0930	420	7.8	16.0	3	5.4	2.3	200	80	--	1300	150
NOV 22...	1115	278	7.5	1.5	2	12.6	1.9	88	8	88	<20	93
MAR 02...	1000	190	7.1	2.0	4	13.9	.8	820	<2	84	<2	57
APR 12...	1000	161	7.1	12.5	3	11.2	1.0	810	<2	180	<2	69
MAY 12...	1345	208	8.4	17.0	2	13.0	1.3	22	240	190	110	70
JUN 20...	1020	272	7.7	23.0	3	8.3	2.3	200	94	1400	50	92
JUL 13...	1045	147	7.2	23.0	15	7.2	3.5	--	>2400	--	>2400	45
AUG 10...	1300	241	7.5	23.5	0	6.9	1.9	--	350	--	>2400	83

DATE	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVFD SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOL-VED SUL-FIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
OCT 07...	69	36	14	21	3.5	99	0	81	2.5	.6	84	28
NOV 22...	44	22	9.3	13	2.3	60	0	49	3.0	--	41	18
MAR 02...	37	13	6.0	10	1.9	24	0	20	3.1	--	28	18
APR 12...	46	17	6.5	8.1	1.6	28	0	23	3.6	--	27	11
MAY 12...	35	17	6.6	11	1.7	43	0	35	.3	--	29	15
JUN 20...	36	22	8.9	15	2.5	68	0	56	2.2	--	35	21
JUL 13...	21	11	4.3	6.5	2.4	29	0	24	2.9	--	17	9.8
AUG 10...	33	20	8.0	13	3.2	61	0	50	3.1	--	33	19

DATE	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 07...	7.9	256	6	--	--	--	--	1.4	--	.39	--	5.1
NOV 22...	--	155	1	--	--	--	--	1.4	--	.13	--	2.8
MAR 02...	--	134	4	--	--	--	--	1.4	--	.05	--	--
APR 12...	--	130	0	--	--	--	--	2.0	--	.04	--	1.2
MAY 12...	--	136	2	--	--	--	--	1.1	--	.09	--	7.1
JUN 20...	--	186	0	--	--	--	--	1.1	--	.10	--	5.9
JUL 13...	--	102	62	1.1	.03	.13	.71	.84	1.9	.16	.08	7.9
AUG 10...	--	167	8	1.7	.05	.13	1.1	1.2	2.9	.19	.15	6.0

01401600 BEDEN BROOK NEAR ROCKY HILL, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)
OCT									
07...	0930	50	40	10	2	160	1	0	1

DATE	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT									
07...	10	170	50	7	90	<.5	1	0	10

01401700 PIKE RUN NEAR ROCKY HILL, NJ

LOCATION.--Lat 40°25'12", long 74°38'28", Somerset County, Hydrologic Unit 02030105, at bridge on State Route 533, 600 ft (183 m) upstream from mouth, 1.4 mi (2.3 km) north of Rocky Hill, and 5.0 mi (8.0 km) north of Princeton.

DRAINAGE AREA.--22.2 mi² (57.5 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1959-62, 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 07...	1015	424	7.6	15.5	6	5.1	1.5	900	2400	--	2400	140
NOV 22...	1200	418	7.7	3.0	3	13.6	1.3	840	80	875	20	150
MAR 02...	1045	235	7.1	2.0	9	13.3	.8	92	240	370	110	65
APR 12...	1050	185	7.2	--	5	11.4	1.2	8100	2	280	130	85
MAY 23...	1035	344	7.6	21.0	2	8.0	2.2	290	49	1100	40	130
JUN 20...	0935	399	7.2	22.0	4	6.9	2.4	590	920	82400	130	140
JUL 13...	1200	201	6.9	22.5	15	8.0	2.9	--	>2400	--	>2400	54
AUG 10...	1345	256	7.7	24.5	1	9.2	.8	--	540	--	240	83

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT 07...	59	36	12	22	3.6	99	0	81	4.0	--	74	32
NOV 22...	91	40	13	21	2.4	72	0	59	2.3	--	81	30
MAR 02...	48	16	6.2	14	2.0	21	0	17	2.7	--	36	25
APR 12...	62	24	6.2	11	1.7	28	0	23	2.8	--	35	14
MAY 23...	66	35	11	19	2.8	78	0	64	3.1	.0	63	21
JUN 20...	76	36	11	22	2.9	78	0	64	7.9	--	66	28
JUL 13...	34	14	4.5	12	2.8	24	0	20	4.8	--	28	15
AUG 10...	43	21	7.3	17	2.7	49	0	40	1.6	--	42	21

DATE	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 07...	--	246	9	--	--	--	--	1.3	--	.16	--	5.2
NOV 22...	--	230	2	--	--	--	--	1.4	--	.10	--	--
MAR 02...	--	165	10	--	--	--	--	1.4	--	.05	--	4.5
APR 12...	--	141	0	--	--	--	--	1.8	--	.03	--	8.6
MAY 23...	2.0	212	0	--	--	--	--	1.3	--	.06	--	6.3
JUN 20...	--	259	0	--	--	--	--	1.0	--	.05	--	6.9
JUL 13...	--	142	52	2.4	.03	.13	.78	.91	3.3	.17	.09	6.9
AUG 10...	--	182	8	1.6	.01	.01	.53	.54	2.1	.09	.06	4.6

01401700 PIKE RUN NEAR ROCKY HILLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY								
23...	1035	0	2	170	0	0	0	3

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY								
23...	40	0	90	.0	8	0	50	4

01401870 SIX MILE RUN NEAR MIDDLEBUSH, NJ

LOCATION.--Lat 40°28'12", long 74°32'42", Somerset County, Hydrologic Unit 02030105, at bridge on South Middlebush Road, 0.4 mi (0.6 km) upstream from Middlebush Brook, 1.6 mi (2.6 km) upstream from mouth, 2.1 mi (3.4 km) south of Middlebush, and 2.2 mi (3.5 km) north of Franklin Park.

DRAINAGE AREA.--10.7 mi^2 (27.7 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1966 to current year.
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)
OCT 07...	1430	285	7.7	17.0	4	10.0	1.2	8140	200	--
NOV 23...	1230	261	7.9	2.0	3	16.0	1.4	120	13	816
FEB 15...	1330	210	7.0	.0	10	9.6	1.8	8690	70	990
MAR 29...	1305	190	7.3	13.5	5	11.4	1.0	826	<2	822
MAY 23...	1135	287	7.7	22.0	4	10.0	2.7	660	220	360
JUN 16...	1225	285	7.5	22.0	1	9.6	1.6	8470	<200	980
JUL 22...	1025	270	8.4	24.5	1	10.0	2.2	--	490	--
AUG 11...	1300	177	7.4	24.5	6	8.4	2.4	--	>24000	--

DATE	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
OCT 07...	<200	89	35	22	8.2	15	2.7	66	0	54
NOV 23...	2	86	43	19	9.3	12	1.7	52	0	43
FEB 15...	920	61	41	14	6.3	15	2.0	24	0	20
MAR 29...	6	57	40	12	6.5	11	1.9	21	0	17
MAY 23...	210	140	80	37	12	16	2.5	73	0	60
JUN 16...	220	90	47	21	9.1	16	2.4	52	0	43
JUL 22...	1300	86	29	20	8.8	16	2.4	70	0	57
AUG 11...	3500	62	22	15	5.9	8.7	2.6	49	0	40

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)
OCT 07...	2.1	.6	39	22	7.6	166	2	--	--
NOV 23...	1.0	--	44	13	--	147	2	--	--
FEB 15...	3.8	--	26	28	--	139	20	--	--
MAR 29...	1.7	--	29	14	--	116	0	--	--
MAY 23...	2.3	.0	42	18	6.1	168	13	--	--
JUN 16...	2.6	--	35	25	--	160	12	--	--
JUL 22...	.4	--	36	20	--	164	16	.61	.01
AUG 11...	3.1	--	23	11	--	128	13	.99	.01

01401870 SIX MILE RUN NEAR MIDDLEBUSH, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT									
07...	--	--	1.1	370	--	.06	--	--	4.1
NOV									
23...	--	--	.84	--	--	.05	--	2.6	--
FEB									
15...	--	--	1.5	--	--	.08	--	5.6	--
MAR									
29...	--	--	1.4	--	--	.01	--	--	--
MAY									
23...	--	--	1.1	--	--	.04	--	5.5	--
JUN									
16...	--	--	1.1	--	--	.03	--	5.0	--
JUL									
22...	.02	.65	.67	--	1.3	.02	.02	6.3	--
AUG									
11...	.02	.56	.58	--	1.6	.10	.05	5.8	--

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)
OCT											
07...	1430	40	10	1	14	80	1	0	28	0	1
MAY											
23...	1135	--	0	1	--	80	0	--	--	0	0

DATE	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)
OCT										
07...	14	10	120	190	80	11000	7	49	40	880
MAY										
23...	--	15	--	--	130	--	3	--	90	--

DATE	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT										
07...	<.5	.0	4	24	0	10	100	--	35	.0
MAY										
23...	.0	--	6	--	0	30	--	0	--	--

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT										
07...	18	2.0	3.1	3.0	2.0	.9	.0	.0	.0	0
MAY										
23...	--	--	--	--	--	--	--	--	--	--

01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, NJ

LOCATION.--Lat 40°28'30", long 74°34'34", Somerset County, Hydrologic Unit 02030105, on left bank 30 ft (9 m) downstream from highway bridge at Blackwells Mills, and 0.3 mi (0.5 km) downstream from Six Mile Run.

DRAINAGE AREA.--258 mi^2 (668 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: June 1903 to December 1904 (gage heights only), August 1921 to current year. Monthly discharge only for some periods, published in WSP 1302. Published as "at Millstone" 1903-4.
CHEMICAL ANALYSES: Water years 1962-67, 1969, 1976 to current year.
SEDIMENT ANALYSES: Water years 1968-73.

REVISED DISCHARGE RECORDS.--WSP 1552: 1924-25(M), 1926.

GAGE.--Water-stage recorder. Concrete control since Nov. 18, 1933. Datum of gage is 26.97 ft (8.220 m) NGVD. June 27, 1903 to Dec. 31, 1904, nonrecording gage at bridge 2.0 mi (3.2 km) downstream at Millstone at different datum. Aug. 4, 1921 to Aug. 16, 1928, nonrecording gage at present site and datum.

REMARKS.--Discharge records excellent except for those above 2,000 ft^3/s (56.6 m^3/s), which are poor. Inflow from and losses to Delaware and Raritan Canal above station. Flow slightly regulated by Lake Carnegie, capacity, 310,000,000 gal (1,173,000 m^3) and several smaller reservoirs, combined capacity, 49,800,000 gal (188,500 m^3).

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--56 years 371 ft^3/s (10.51 m^3/s), 19.53 in/yr (496 mm/yr).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft^3/s (85.0 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 25	1800	3550	101	8.60	2.621
Mar. 23	0745	*6350	180	11.62	3.542
Apr. 5	2145	3850	109	9.12	2.780

Minimum discharge, 25 ft^3/s (0.708 m^3/s) Sept. 13.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,200 ft^3/s (629 m^3/s) Aug. 28, 1971, gage height, 18.68 ft (5.694 m) from high-water mark; minimum, about 5 ft^3/s (0.14 m^3/s) Sept. 16, 1923.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	355	82	72	46	539	241	218	34	59	169	64
2	110	239	79	67	45	400	320	189	37	51	301	68
3	112	192	73	67	47	332	1100	174	36	43	349	61
4	112	168	66	68	48	624	565	150	32	37	424	48
5	98	148	63	68	51	1500	2940	291	31	34	231	46
6	89	134	60	66	52	709	3120	303	35	32	185	48
7	83	119	261	68	50	521	1310	220	67	38	184	46
8	75	110	475	68	52	396	644	183	62	46	122	44
9	441	103	277	64	50	331	472	166	208	42	100	48
10	442	98	237	128	53	289	382	165	398	36	101	59
11	198	93	205	347	89	260	331	148	238	34	131	57
12	141	88	168	245	257	245	302	134	156	1000	84	44
13	113	86	150	161	505	603	275	122	122	1070	110	29
14	89	84	122	109	602	1790	242	108	97	367	176	33
15	77	82	116	109	515	814	221	98	82	163	187	31
16	67	81	112	94	391	524	201	93	74	101	147	31
17	59	80	113	76	286	403	185	87	67	79	131	44
18	57	79	107	76	217	503	174	83	61	64	134	46
19	55	77	98	84	181	683	164	88	54	54	110	40
20	115	76	100	84	169	444	153	87	51	66	87	48
21	730	74	154	81	163	431	149	80	82	54	71	54
22	348	73	128	75	153	1620	145	71	63	44	172	48
23	240	71	119	70	167	5420	141	64	51	37	161	50
24	200	68	108	66	463	2730	141	60	43	33	128	183
25	193	67	93	65	3210	921	268	56	51	115	191	422
26	269	66	96	63	2740	573	257	51	92	161	144	358
27	221	68	94	59	1110	442	602	44	46	66	116	338
28	175	67	91	56	791	398	334	40	43	56	95	294
29	148	79	92	53	---	351	361	38	77	46	79	209
30	128	93	84	49	---	322	280	33	71	41	66	166
31	274	---	79	47	---	295	---	33	---	40	57	---
TOTAL	5566	3218	4102	2805	12503	25413	16020	3677	2561	4109	4743	3057
MEAN	180	107	132	90.5	447	820	534	119	85.4	133	153	102
MAX	730	355	475	347	3210	5420	3120	303	398	1070	424	422
MIN	55	66	60	47	45	245	141	33	31	32	57	29
CFSM	.70	.42	.51	.35	1.73	3.18	2.07	.46	.33	.52	.59	.40
IN.	.80	.46	.59	.40	1.80	3.66	2.31	.53	.37	.59	.68	.44

CAL YR 1976 TOTAL 100494 MEAN 275 MAX 4470 MIN 24 CFSM 1.07 IN 14.49
WTR YR 1977 TOTAL 87774 MEAN 240 MAX 5420 MIN 29 CFSM .93 IN 12.66

01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./ 100 ML)	FECAL COLIFORM (EC BROTH) (MPN)
OCT 07...	1245	81	266	7.2	16.0	11	5.0	3.2	200	350
NOV 23...	1145	71	276	6.9	3.0	4	9.6	3.5	836	33
FEB 15...	1235	494	277	7.1	1.0	10	11.8	4.5	330	2
MAR 29...	1205	346	180	6.9	9.0	20	12.4	2.6	45	<2
MAY 12...	1230	134	228	6.9	15.5	10	7.0	3.0	90	350
JUN 16...	1145	73	248	7.0	22.5	3	4.5	3.2	82200	9
JUL 22...	0950	46	252	6.9	27.0	1	4.0	5.1	--	>2400
AUG 11...	1220	125	230	7.2	25.0	0	4.6	3.2	--	>2400

DATE	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
OCT 07...	--	130	64	24	16	5.8	18	4.0	49	0
NOV 23...	830	2	74	41	18	7.1	15	4.0	40	0
FEB 15...	82500	240	68	41	16	6.8	23	3.4	33	0
MAR 29...	88	23	53	38	13	5.1	11	2.5	18	0
MAY 12...	820	20	67	37	17	5.9	15	2.9	37	0
JUN 16...	3300	33	65	28	16	6.1	16	3.4	45	0
JUL 22...	--	240	68	32	17	6.3	17	3.6	44	0
AUG 11...	--	1600	63	23	16	5.7	14	3.7	49	0

DATE	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)
OCT 07...	40	4.9	.4	32	26	4.9	151	35	--	--
NOV 23...	33	8.1	--	36	23	--	149	7	--	--
FEB 15...	27	4.2	--	29	40	--	163	27	--	--
MAR 29...	15	3.6	--	29	15	--	113	19	--	--
MAY 12...	30	7.5	.0	30	21	7.2	135	11	--	--
JUN 16...	37	7.2	--	30	23	--	150	19	--	--
JUL 22...	36	8.9	--	32	23	--	146	34	1.1	.04
AUG 11...	40	4.9	--	27	21	--	158	41	1.2	.05

01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 07...	--	--	1.7	180	--	.46	--	6.6	5.9
NOV 23...	--	--	1.7	--	--	.46	--	4.6	--
FEB 15...	--	--	2.5	--	--	.22	--	8.1	--
MAR 29...	--	--	2.2	--	--	.09	--	--	--
MAY 12...	--	--	1.4	--	--	.23	--	5.7	--
JUN 16...	--	--	1.4	--	--	.33	--	5.2	--
JUL 22...	.38	1.0	1.4	--	2.5	.41	.30	7.1	--
AUG 11...	.33	.87	1.2	--	2.4	.35	.24	6.0	--

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)
OCT 07...	1245	440	10	2	13	120	0	0	27	0	2
MAY 12...	1230	--	40	1	--	9	0	--	--	0	0

DATE	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)
OCT 07...	20	10	30	1100	70	13000	7	66	150	700
MAY 12...	--	6	--	--	210	--	5	--	150	--

DATE	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT 07...	<.5	.0	3	20	0	20	130	--	5	.0
MAY 12...	.0	--	5	--	0	30	--	1	--	--

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT 07...	7	2.7	4.2	18	.7	.0	.0	.0	.0	0
MAY 12...	--	--	--	--	--	--	--	--	--	--

01402540 MILLSTONE RIVER AT WESTON, NJ

LOCATION.--Lat 40°31'47", long 74°35'19", Somerset County, Hydrologic Unit 02030105, at bridge on Wilhouski Street, 0.8 mi (1.2 km) southwest of Alma White College, and 1.9 mi (3.0 km) north of Millstone.

DRAINAGE AREA.--271 mi^2 (702 km^2), includes approximately 13 mi^2 (34 km^2) which drains into Delaware and Raritan Canal.

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 07...	1130	260	6.9	16.0	7	4.7	3.0	280	20	--	49	63
NOV 23...	1100	276	6.9	3.0	5	8.6	3.8	220	350	58	23	77
FEB 15...	1145	276	7.0	1.0	9	11.8	4.9	B1200	33	--	920	64
MAR 29...	1125	175	7.0	8.0	25	11.9	1.9	220	<2	40	79	53
MAY 12...	1120	230	7.0	15.0	8	6.8	3.6	91	1600	41	23	73
JUN 16...	1100	244	6.9	21.5	1	5.6	3.5	100	5	200	49	71
JUL 22...	0905	222	6.9	28.0	1	5.8	4.0	--	540	--	79	63
AUG 11...	1100	211	7.2	25.0	3	5.0	3.6	--	2200	--	>2400	63

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT 07...	24	16	5.7	16	3.8	48	0	39	9.7	--	34	23
NOV 23...	40	19	7.2	16	4.0	45	0	37	9.1	--	38	23
FEB 15...	26	15	6.4	23	3.3	46	0	38	7.4	--	28	40
MAR 29...	37	13	5.0	9.8	2.5	20	0	16	3.2	--	29	14
MAY 12...	43	19	6.2	14	2.8	37	0	30	5.9	.0	32	19
JUN 16...	33	18	6.4	15	3.2	46	0	38	9.3	--	31	21
JUL 22...	27	16	5.7	14	3.4	44	0	36	8.9	--	28	19
AUG 11...	26	16	5.6	13	3.4	45	0	37	4.5	--	26	18

DATE	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 07...	--	150	17	--	--	--	--	1.7	--	.28	--	--
NOV 23...	--	152	12	--	--	--	--	1.4	--	.27	--	4.4
FEB 15...	--	160	20	--	--	--	--	2.5	--	.23	--	4.9
MAR 29...	--	97	25	--	--	--	--	1.8	--	.13	--	--
MAY 12...	7.6	134	26	--	--	--	--	1.5	--	.18	--	6.2
JUN 16...	--	135	13	--	--	--	--	1.4	--	.29	--	5.3
JUL 22...	--	138	29	.88	.02	.18	1.1	1.3	2.2	.44	.22	6.8
AUG 11...	--	149	58	1.1	.03	.19	1.2	1.4	2.5	.32	.19	6.1

01402540 MILLSTONE RIVER AT WESTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY								
12...	1120	40	1	20	0	0	0	5

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY								
12...	200	3	140	.0	9	0	70	0

01402730 ROYCE BROOK AT SOUTH MAIN STREET AT MANVILLE, NJ

LOCATION.--40°32'12", long 74°35'24", Somerset County, Hydrologic Unit 02030105, at bridge on South Main Street in Manville, 0.5 mi (0.8 km) upstream from mouth, and 0.8 mi (1.2 km) west of Zarephath.

DRAINAGE AREA.--16.3 mi² (42.2 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 07...	1045	414	7.4	16.5	9	7.3	4.0	B76000	54000	--	7900	150
NOV 23...	1000	442	7.4	1.0	5	14.0	1.7	200	70	250	<20	170
FEB 15...	1045	271	6.9	1.0	15	12.4	4.2	B470	7	B13000	540	72
MAR 29...	1050	257	7.4	11.0	6	12.8	.9	210	<2	480	240	77
MAY 12...	1030	313	7.8	15.0	3	13.6	1.6	280	3500	834	<20	110
JUN 16...	1025	445	7.6	21.5	1	10.6	2.2	3000	2400	3100	540	150
JUL 21...	1350	366	9.0	13.5	--	14.0	4.2	--	790	--	50	--
AUG 11...	1020	304	7.6	24.5	10	7.3	2.7	--	330	--	240	110

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT 07...	64	42	10	21	3.6	105	0	86	6.7	.5	67	26
NOV 23...	88	43	14	21	2.5	100	0	82	6.4	--	85	24
FEB 15...	48	19	5.9	21	2.8	29	0	24	5.8	--	31	41
MAR 29...	44	20	6.6	14	2.2	40	0	33	2.5	--	40	19
MAY 12...	56	31	8.6	17	2.2	66	0	54	1.7	.0	50	21
JUN 16...	68	42	12	24	3.2	100	0	82	4.0	--	76	31
JUL 21...	--	--	--	--	--	61	7	62	.3	--	--	--
AUG 11...	47	28	8.9	16	3.5	77	0	63	3.1	--	41	22

DATE	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 07...	11	246	15	--	--	--	--	1.4	--	.14	--	5.6
NOV 23...	--	267	3	--	--	--	--	1.1	--	.07	--	3.2
FEB 15...	--	175	24	--	--	--	--	1.7	--	.14	--	7.8
MAR 29...	--	148	1	--	--	--	--	1.5	--	.04	--	--
MAY 12...	6.6	180	4	--	--	--	--	1.4	--	.05	--	6.7
JUN 16...	--	276	0	--	--	--	--	1.4	--	.09	--	6.1
JUL 21...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	--	218	27	1.6	.05	.08	.92	1.0	2.6	.13	.06	5.1

01402730 ROYCE BROOK AT SOUTH MAIN STREET AT MANVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUM-INUM (AL) (UG/L)	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
OCT 07...	1045	240	10	7	280	1	6	0	10
MAY 12...	1030	--	40	1	120	0	0	0	40

DATE	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
OCT 07...	510	40	7	530	--	2	0	30	--
MAY 12...	--	20	4	100	.0	16	0	40	1

01403060 RARITAN RIVER BELOW CALCO DAM, AT BOUND BROOK, NJ

LOCATION.--Lat 40°33'05", long 74°32'54", Somerset County, Hydrologic Unit 02030105, on right bank 1,000 ft (305 m) downstream from Calco Dam and Cuckold Brook, 1.2 mi (1.9 km) downstream from Millstone River, and 1.2 mi (1.9 km) southwest of Bound Brook.

DRAINAGE AREA.--785 mi² (2,033 km²), includes 11 mi² (28 km²) which drains into the Delaware and Raritan Canal.

PERIOD OF RECORD.--
WATER DISCHARGE: September 1903 to March 1909, October 1944 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1966 published as "Raritan River at Bound Brook" (station 01403000).

REVISED DISCHARGE RECORDS.--WSP 1552: 1903-7, 1946(M), 1949, 1952(P).

GAGE.--Water-stage recorder. Datum of gage is NGVD. Sept. 12, 1903 to Mar. 31, 1909, nonrecording gages at highway bridge, 1.2 mi (1.9 km) downstream at different datum. October 1944 to Sept. 30, 1966, water-stage recorder and concrete control at site 1,120 ft (341 m) upstream at datum 18.06 ft (5.505 m) higher.

REMARKS.--Discharge records excellent. Water diverted 1.9 mi (3.0 km) above station by Elizabethtown Water Co. for municipal supply (see Raritan River Basin, diversions). Flow regulated by Spruce Run and Round Valley Reservoirs (see Raritan River Basin, reservoirs in). Diversions to Round Valley Reservoir (see Raritan River Basin, diversions). Slight diurnal fluctuations at low flow.

AVERAGE DISCHARGE.--38 years, (1903-8, 1944-77), 1,247 ft³/s (35.32 m³/s), adjusted for diversion by Elizabethtown Water Co. since 1944 and to Round Valley Reservoir since 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 12,000 ft³/s (340 m³/s) and maximum (*):

Date	Time	Discharge		Elevation	
		(ft³/s)	(m³/s)	(ft)	(m)
Feb. 25	1330	18500	524	27.26	8.309
Mar. 23	0615	*26300	745	29.95	9.129
Apr. 5	1730	17300	490	26.88	8.193

Minimum discharge, 92 ft³/s (2.61 m³/s) Feb. 9, June 5, elevation, 16.43 ft (5.008 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,100 ft³/s (1.310 m³/s) Aug. 28, 1971, elevation, 37.47 ft (11.421 m), from floodmark; minimum daily, 37 ft³/s (1.05 m³/s) Sept. 6, 1964.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	233	1400	156	229	155	1720	1060	796	170	164	299	177
2	285	711	177	254	158	1240	1260	696	272	164	616	187
3	402	521	281	263	158	976	4290	661	209	164	411	180
4	416	463	303	245	158	2320	2100	586	161	149	788	167
5	303	425	241	213	173	6380	12700	1640	114	134	389	167
6	213	402	161	170	158	2620	9640	2020	140	155	281	177
7	180	362	1060	194	131	1870	3940	1150	241	225	358	187
8	161	326	2050	213	131	1450	2580	852	217	308	245	177
9	689	290	604	194	120	1170	2000	828	485	201	229	164
10	1440	281	574	321	131	1000	1690	844	1500	128	321	177
11	480	260	526	616	184	876	1480	668	828	131	429	173
12	312	253	438	490	470	788	1320	550	475	1890	221	140
13	245	243	371	362	1330	2820	1170	485	362	2690	416	131
14	209	236	225	299	2000	7670	1060	447	276	640	628	134
15	177	222	281	303	1480	2970	932	402	237	344	438	149
16	149	217	294	272	908	2070	852	353	201	213	299	177
17	143	204	294	229	616	1600	773	312	161	191	225	299
18	137	211	272	194	456	1850	703	308	180	155	217	237
19	131	220	225	198	407	2280	628	556	167	187	164	140
20	247	206	245	249	389	1600	598	434	187	281	184	245
21	2390	197	380	258	353	1460	568	348	308	245	217	281
22	1030	185	299	209	299	7120	550	290	272	184	438	194
23	544	175	358	170	353	20900	526	237	164	161	407	164
24	435	165	326	177	1210	7040	574	217	125	167	233	717
25	521	186	258	194	13700	3210	1670	221	339	339	326	1760
26	1210	200	281	187	6040	2390	1170	198	1260	495	238	1170
27	860	203	213	170	2770	1910	2740	173	330	187	180	860
28	526	206	258	158	2470	1720	1520	152	225	191	161	640
29	435	238	321	155	---	1570	1360	146	353	173	177	434
30	375	231	249	125	---	1380	1010	140	241	177	161	335
31	1030	---	258	131	---	1260	---	131	---	161	152	---
TOTAL	15908	9439	11979	7442	36908	95230	62464	16841	10200	10994	9848	10140
MEAN	513	315	386	240	1318	3072	2082	543	340	355	318	338
MAX	2390	1400	2050	616	13700	20900	12700	2020	1500	2690	788	1760
MIN	131	165	156	125	120	788	526	131	114	128	152	131

CAL YR 1976 TOTAL 307152 MEAN 839 MAX 17200 MIN 107
WTR YR 1977 TOTAL 297393 MEAN 815 MAX 20900 MIN 114

01403500 GREEN BROOK AT PLAINFIELD, NJ

LOCATION.--Lat 40°36'53", long 74°25'55", Union County, Hydrologic Unit 02030105, on left bank 20 ft (6 m) downstream from Sycamore Avenue Bridge in Plainfield, and 1.0 mi (1.6 km) upstream from Stony Brook.

DRAINAGE AREA.--9.75 mi² (25.25 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: May 1938 to current year.

REVISED DISCHARGE RECORDS.--WSP 921: 1938-40. WRD-NJ 1969: 1966-68. WRD-NJ 1973: 1968(M), 1969(M), 1971(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 70.37 ft (21.449 m) NGVD.

REMARKS.--Records poor. Water diverted from Baltusrol well field by Commonwealth Water Co., and from wells in vicinity of Mountainside and Scotch Plains by Plainfield-Union Water Co., for municipal supply and from private and industrial wells in Plainfield and vicinity. Diurnal fluctuations at low flow caused by pumping from wells near brook in Plainfield. During extreme high stages there is some overflow above gage from Green Brook basin to adjacent Stony Brook and Cedar Brook basins.

AVERAGE DISCHARGE.--39 years, 12.4 ft³/s (0.351 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 380 ft³/s (10.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 24	2300	857	24.3	3.68	1.122
Mar. 22	1700	*905	25.6	3.78	1.152

Minimum discharge, 0.38 ft³/s (0.011 m³/s) Sept. 12, gage height, 0.51 ft (0.155 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,890 ft³/s (81.8 m³/s) July 23, 1938 (gage height, 5.82 ft or 1.774 m) from rating curve extended above 1,300 ft³/s (36.8 m³/s) on basis of contracted-opening measurement of peak flow (an unknown additional amount probably bypassed gage); no flow part or all of day at times in most years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	7.7	1.8	1.6	.88	10	6.6	3.6	30	2.5	.60	.90
2	2.9	4.1	1.9	1.5	.88	7.9	39	3.7	3.6	2.2	2.0	.80
3	27	3.2	1.2	1.5	.88	6.4	39	3.4	1.6	2.0	5.0	.66
4	4.1	2.9	1.1	1.8	.90	66	20	5.2	1.1	1.9	1.5	.54
5	2.3	2.5	1.2	2.0	.98	45	175	33	1.5	1.8	10	.50
6	1.9	2.1	1.3	1.5	1.7	17	38	18	8.1	1.9	3.9	.60
7	1.6	2.1	51	1.9	1.5	12	22	8.3	13	2.5	21	.60
8	1.4	2.1	10	1.7	1.8	9.1	17	6.2	5.3	3.6	5.0	.54
9	76	1.9	4.6	1.5	2.0	7.7	14	8.2	45	2.9	4.1	.54
10	6.5	2.3	4.1	9.6	1.9	6.9	12	5.4	25	2.0	5.6	4.1
11	2.9	2.3	3.5	8.0	3.5	6.2	11	4.5	12	1.8	2.5	.80
12	2.5	2.0	4.9	4.4	10	5.6	9.3	4.0	9.0	20	2.5	.47
13	2.1	1.9	3.1	3.5	20	54	8.3	3.6	5.0	10	12	.50
14	1.9	1.6	2.5	3.0	31	38	7.5	2.9	4.1	1.8	3.6	.66
15	1.6	2.3	2.5	2.0	25	16	6.7	2.8	3.9	.88	1.3	1.0
16	1.8	1.9	2.7	1.8	10	12	6.0	3.1	2.9	1.1	1.2	5.0
17	1.8	1.8	2.9	1.7	3.7	9.0	5.5	4.1	2.7	.96	1.4	8.8
18	1.9	1.8	2.3	1.5	2.9	19	5.2	10	2.5	.82	1.5	1.5
19	1.6	1.6	2.1	1.3	2.7	14	4.9	26	2.5	.74	1.1	1.1
20	64	1.6	5.2	1.2	2.5	11	4.7	5.9	5.6	.68	1.0	22
21	33	1.4	8.0	1.1	2.5	9.4	4.7	2.5	13	.65	.89	3.3
22	5.2	1.4	3.1	1.0	2.5	298	4.1	1.6	2.5	.60	21	2.1
23	3.1	1.8	3.1	1.0	3.3	94	3.7	1.8	2.5	.56	2.2	8.7
24	5.2	1.8	2.7	1.0	125	31	10	2.3	2.3	.58	12	24
25	5.9	1.4	2.1	.96	144	21	10	1.6	71	.80	7.7	52
26	24	1.6	2.7	.96	30	16	7.1	1.8	7.0	.70	1.5	13
27	5.2	1.6	2.7	.94	17	13	6.2	1.1	5.0	.64	1.1	7.5
28	3.5	1.6	2.3	.92	17	12	7.1	.80	8.1	.62	1.0	4.9
29	2.9	5.2	2.5	.90	---	11	6.0	.84	9.0	.60	.93	2.9
30	2.5	2.3	2.1	.90	---	8.9	3.9	.96	3.6	.60	.81	2.4
31	30	---	1.7	.88	---	7.8	---	1.2	---	.60	.79	---
TOTAL	333.6	69.8	142.9	63.56	466.02	894.9	514.5	178.40	258.4	69.03	136.72	172.41
MEAN	10.8	2.33	4.61	2.05	16.6	28.9	17.2	5.75	8.61	2.23	4.41	5.75
MAX	76	7.7	51	9.6	144	298	175	33	45	20	21	52
MIN	1.4	1.4	1.1	.88	.88	5.6	3.7	.80	1.1	.56	.60	.47

CAL YR 1976 TOTAL 3706.40 MEAN 10.1 MAX 205 MIN 1.1
WTR YR 1977 TOTAL 3380.24 MEAN 9.04 MAX 298 MIN .47

01403540 STONY BROOK AT WATCHUNG, NJ

LOCATION.--Lat 40°38'12", long 74°27'06", Somerset County, Hydrologic Unit 02030105, on right bank at Watchung Borough Administration Building, 150 ft (45.7 m) downstream from Watchung Avenue bridge, and 2.9 mi (4.7 km) upstream from confluence with Green Brook.

DRAINAGE AREA.--5.51 mi^2 (14.3 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 172.24 ft (52.499 m) NGVD.

REMARKS.--Discharge records fair. Some regulation from Watchung and Best Lakes directly upstream from station.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft^3/s (7.08 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 22	1535	*798	22.6	5.47	1.667
Apr. 5	0140	368	10.4	4.19	1.277

Minimum daily discharge, 0.40 ft^3/s (0.009 m^3/s) Sept. 15.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,420 ft^3/s (125 m^3/s) July 14, 1975 (gage height, 10.40 ft or 3.170 m) from rating curve extended above 500 ft^3/s (14.2 m^3/s) on basis of slope-area measurements of peak flow; minimum daily, 0.40 ft^3/s (0.009 m^3/s) Sept. 15, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 2, 1973, reached a stage of 14.5 ft (4.42 m), from floodmark, discharge, 11,400 ft^3/s (232 m^3/s) from slope-area measurements of peak flow.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	6.0	1.5	1.3	.70	8.2	7.4	5.0	22	1.6	.70	1.2
2	1.9	2.7	1.7	1.2	.60	6.7	31	10	7.0	1.5	.80	1.2
3	18	2.3	1.5	1.2	.60	6.2	29	17	1.2	1.2	5.5	.90
4	3.3	2.1	1.3	1.2	.90	17	16	4.5	1.2	.90	.90	.80
5	1.8	1.9	1.5	1.2	1.3	26	120	19	.90	.90	8.7	.80
6	1.5	1.8	1.7	1.2	1.3	12	27	5.0	1.5	.90	4.3	6.5
7	1.4	1.7	36	1.3	.80	8.8	18	6.0	2.1	2.8	13	.44
8	1.3	1.6	7.4	1.2	.90	7.3	15	13	1.3	3.5	4.5	.44
9	53	1.6	5.0	.90	.90	6.4	13	29	37	1.6	3.5	.44
10	8.5	1.8	4.0	7.4	2.5	6.0	12	3.8	13	1.3	5.0	.80
11	2.1	1.8	3.8	7.1	4.2	5.4	11	3.1	5.5	1.2	1.6	.44
12	1.8	1.7	4.5	3.8	7.9	5.1	9.6	2.7	3.8	3.5	1.6	.44
13	1.6	1.6	4.0	2.8	13	39	9.0	2.5	3.0	3.3	9.9	.44
14	1.5	1.5	2.6	2.6	22	22	8.1	2.3	2.3	1.5	7.4	.44
15	1.3	2.0	2.6	2.8	9.6	16	7.1	2.1	2.1	1.2	.90	.40
16	1.3	1.8	2.6	2.3	3.9	12	6.5	2.7	3.3	.80	.80	.90
17	1.3	1.6	2.8	2.3	2.7	9.0	6.0	6.0	1.8	.80	1.5	2.1
18	1.5	1.7	2.3	2.3	2.6	20	5.8	11	1.6	.80	1.6	1.5
19	1.3	1.7	2.1	2.3	2.5	15	5.3	19	1.6	.60	1.3	17
20	45	1.6	3.8	2.1	2.5	12	5.0	6.0	2.3	1.5	1.3	6.0
21	17	1.5	6.5	1.8	2.5	11	4.8	2.3	3.0	.80	1.2	1.7
22	3.6	1.7	2.8	1.6	2.7	203	4.5	1.5	1.5	.60	15	2.9
23	2.9	1.7	2.6	1.6	3.9	48	4.3	1.7	1.2	.44	2.6	10
24	3.6	1.7	2.1	1.5	60	23	7.4	2.0	.90	.44	6.0	22
25	5.7	1.6	1.8	1.4	100	17	9.9	2.1	13	1.2	6.3	38
26	16	1.6	2.3	1.3	43	15	7.7	1.5	7.7	1.5	2.3	7.3
27	3.9	1.5	1.8	1.2	20	13	9.3	1.1	2.8	.80	1.8	4.5
28	2.7	1.3	1.8	1.1	11	12	7.1	1.0	2.1	.60	1.6	3.3
29	2.3	3.3	1.8	1.0	---	11	7.4	.90	3.0	.51	1.5	2.7
30	2.1	1.8	1.6	.90	---	9.6	5.5	.80	1.8	.51	1.5	2.5
31	18	---	1.5	.80	---	8.7	---	1.8	---	.51	1.2	---
TOTAL	232.0	58.2	119.3	62.70	324.50	661.4	429.7	186.40	151.50	39.31	115.80	138.08
MEAN	7.48	1.94	3.85	2.02	11.6	21.3	14.3	6.01	5.05	1.27	3.74	4.60
MAX	53	6.0	36	7.4	100	203	120	29	37	3.5	15	38
MIN	1.3	1.3	1.3	.80	.60	5.1	4.3	.80	.90	.44	.70	.40
CFSM	1.36	.35	.70	.37	2.11	3.87	2.60	1.09	.92	.23	.68	.84
IN.	1.57	.39	.81	.42	2.19	4.46	2.90	1.26	1.02	.27	.78	.93

CAL YR 1976 TOTAL 2714.08 MEAN 7.42 MAX 162 MIN .45 CFSM 1.35 IN 18.32
WTR YR 1977 TOTAL 2518.89 MEAN 6.90 MAX 203 MIN .40 CFSM 1.25 IN 17.00

NOTE.--No gage-height record Oct. 1 to Dec. 7, Feb. 8 to Mar. 18.

01403900 BOUND BROOK AT MIDDLESEX, NJ

LOCATION.--Lat 40°35'06", long 74°30'29", Somerset County, Hydrologic Unit 02030105, on right bank along Green Brook Road, 107 ft (33 m) upstream from the bridge and intersection with Sebrings Mill Road, 0.4 mi (0.6 km) downstream of mouth of Green Brook, and 2.3 mi (3.7 km) upstream from mouth.

DRAINAGE AREA.--48.4 mi² (125.4 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1972 to September 1977 (discontinued).

GAGE.--Water-stage recorder above concrete dam. Datum of gage is NGVD.

REMARKS.--Discharge records fair.

AVERAGE DISCHARGE.--5 years, 77.3 ft³/s (2.189 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s (19.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Elevation (ft)	Elevation (m)
Feb. 25	0445	1270	36.0	33.84	10.314
Mar. 22	2230	*1740	49.3	34.82	10.613
Apr. 5	0830	765	21.7	32.39	9.872

Minimum daily discharge, 4.7 ft³/s (0.13 m³/s) Aug. 16, Sept. 15.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,000 ft³/s (198 m³/s) Aug. 2, 1973, elevation, 41.18 ft (12.552 m), from floodmark; minimum daily, 2.5 ft³/s (0.071 m³/s) July 21, 1974.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	61	15	14	7.1	52	40	27	33	17	5.5	7.2
2	26	37	12	13	7.1	45	100	29	30	16	6.0	7.2
3	81	31	13	12	7.1	44	156	42	15	13	15	7.5
4	54	27	9.0	13	7.2	150	75	29	6.2	12	38	6.5
5	28	22	7.0	16	7.5	179	529	111	10	13	14	6.0
6	27	19	15	15	8.0	81	171	80	20	15	25	5.0
7	17	17	145	12	10	64	92	41	36	37	49	5.6
8	15	15	96	15	14	56	76	34	17	44	30	5.8
9	206	14	45	13	15	49	64	66	150	20	8.5	4.8
10	118	13	32	20	16	45	58	34	142	13	7.9	25
11	35	16	30	76	17	41	50	23	41	11	6.8	12
12	24	15	32	60	25	38	45	20	25	62	6.8	6.9
13	20	13	34	35	201	128	40	19	20	30	37	5.5
14	19	12	45	26	171	159	36	18	19	18	32	5.0
15	16	10	27	20	66	77	33	17	18	12	13	4.7
16	14	16	23	16	45	62	30	18	27	9.0	4.7	5.0
17	13	13	24	14	30	51	28	19	18	10	12	64
18	11	11	21	12	21	82	26	26	16	10	12	18
19	13	12	18	11	18	84	25	47	14	9.0	14	10
20	85	11	23	10	16	57	24	23	21	8.4	13	84
21	249	10	61	9.6	16	56	23	18	59	7.6	11	60
22	59	9.0	44	9.2	17	575	27	18	18	7.0	89	6.7
23	33	9.5	28	9.0	29	653	30	10	15	6.0	33	15
24	29	10	23	8.5	119	130	38	17	14	5.4	18	60
25	47	10	18	8.2	648	89	68	15	67	6.0	53	169
26	105	10	15	7.8	125	74	43	10	152	7.5	18	56
27	47	10	20	7.6	79	63	37	7.5	37	7.0	14	35
28	32	10	22	7.5	62	57	40	6.0	25	6.4	11	23
29	27	32	21	7.4	---	56	56	5.0	46	5.8	10	17
30	23	26	17	7.3	---	51	31	5.0	20	5.6	9.0	12
31	102	---	15	7.2	---	47	---	11	---	5.5	7.5	---
TOTAL	1622	521.5	950.0	512.3	1804.0	3395	2091	845.5	1131.2	449.2	623.7	749.4
MEAN	52.3	17.4	30.6	16.5	64.4	110	69.7	27.3	37.7	14.5	20.1	25.0
MAX	249	61	145	76	648	653	529	111	152	62	89	169
MIN	11	9.0	7.0	7.2	7.1	38	23	5.0	6.2	5.4	4.7	4.7

CAL YR 1976 TOTAL 16572.4 MEAN 45.3 MAX 900 MIN 4.0
WTR YR 1977 TOTAL 14694.8 MEAN 40.3 MAX 653 MIN 4.7

01404100 RARITAN RIVER NEAR SOUTH BOUND BROOK, NJ

(Nacional stream-quality accounting network and Pesticide program station)

LOCATION.--Lat 40°30'47", long 74°32'24", Somerset County, Hydrologic Unit 02030105, water-quality recorder on right bank, 0.1 mi (0.2 km) upstream from Fieldsville Dam, 0.3 mi (0.5 km) upstream from south crossing of Interstate Highway 287, and 1.5 mi (2.4 km) southeast of South Bound Brook.

DRAINAGE AREA.--862 mi² (2,233 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1966 to current year.
SEDIMENT ANALYSES: Water years 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1969 to March 1977 (discontinued).
pH: May 1969 to March 1977 (discontinued).
WATER TEMPERATURES: May 1969 to March 1977 (discontinued).
DISSOLVED OXYGEN: May 1969 to March 1977 (discontinued).

REMARKS.--Records of instantaneous discharge are given for 01403060 Raritan River below Calco Dam, at Bound Brook, and 01403900 Bound Brook at Middlesex, NJ, including a correction for the ungaged drainage area. Missing continuous water-quality records are the result of malfunction of sensor or sampling mechanism.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Minimum, 0.0°C on several days during winter months.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,570 micromhos Oct. 20, 1970; minimum, 45 micromhos Mar. 3, 1972.
pH: Maximum, 12.4 Nov. 12, 1969; minimum, 3.4 Nov. 18, 1972.
WATER TEMPERATURES: Maximum, 32.0°C July 9, 1974; minimum, 0.0°C on several days during winter months.
DISSOLVED OXYGEN: Maximum, 16.0 mg/L Dec. 20, 1975; minimum, 0.0 mg/L Oct. 5, 1971.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)
OCT 14...	1000	248	793	7.2	11.0	4	8.8	2.7	B990	--	190	140
NOV 29...	1130	279	808	7.2	7.0	4	11.6	2.6	B930	220	240	170
DEC 27...	0930	202	598	8.0	.0	6	13.7	3.0	B16	80	160	100
JAN 24...	1230	196	796	7.4	.0	3	13.9	9.4	B6000	2700	160	100
FEB 17...	1100	663	425	7.3	.5	6	14.0	4.4	120	72	110	70
MAR 31...	1400	1300	326	7.3	15.5	5	9.0	2.2	B2200	310	78	46
APR 26...	1315	1110	314	7.4	13.0	6	9.6	3.8	B1300	620	90	55
MAY 10...	1100	914	343	7.6	12.0	5	9.4	4.2	64	B30	95	52
JUN 09...	1320	699	683	7.6	17.5	10	7.8	7.1	4200	B10000	140	86
JUL 29...	0940	190	784	7.6	21.5	2	6.0	5.6	670	5600	200	160
AUG 09...	1240	327	577	7.8	27.0	6	7.6	6.6	32000	12000	140	93
SEP 13...	0945	144	986	7.3	19.0	4	6.3	4.4	B120	53000	250	200

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
OCT 14...	63	8.0	56	6.1	61	0	50	6.2	.5	160	86	.2
NOV 29...	78	11	48	4.6	81	--	66	8.2	--	160	83	.2
DEC 27...	49	9.1	37	3.9	68	--	56	1.1	--	110	59	.2
JAN 24...	49	10	74	7.4	76	--	62	4.8	--	110	120	.1
FEB 17...	31	7.4	34	4.1	46	--	38	3.7	--	65	62	.1
MAR 31...	23	4.9	15	2.2	38	--	31	3.0	--	53	31	.1
APR 26...	25	6.7	20	2.6	43	0	35	2.7	--	49	28	.1
MAY 10...	27	6.8	23	3.1	53	0	43	2.1	--	57	35	.1
JUN 09...	41	8.0	48	4.7	60	--	49	2.4	--	88	79	.2
JUL 29...	67	7.5	68	8.2	49	--	40	2.0	--	180	89	.1
AUG 09...	45	7.2	52	6.3	60	--	49	1.5	--	98	72	.2
SEP 13...	85	9.0	70	4.5	66	--	54	5.3	--	210	110	.2

01404100 RARITAN RIVER NEAR SOUTH BOUND BROOK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 14...	11	433	9	1.6	6.7	2.3	9.0	400	11	.36	9.6	1.9
NOV 29...	7.3	463	4	1.6	5.7	4.2	9.9	--	12	.54	6.8	--
DEC 27...	9.1	333	3	1.8	3.4	1.2	4.6	--	6.4	.34	11	--
JAN 24...	11	440	10	2.3	--	--	--	--	--	.53	1.8	--
FEB 17...	10	259	2	1.9	2.9	1.0	3.9	--	5.8	.29	4.6	--
MAR 31...	11	191	0	1.6	1.6	.90	2.5	--	4.1	.17	--	--
APR 26...	9.2	191	8	1.0	1.2	.70	1.9	--	2.9	.14	4.3	--
MAY 10...	7.7	210	6	1.2	2.5	.90	3.4	--	4.6	.17	5.5	--
JUN 09...	8.5	350	23	.96	6.5	11	18	--	19	.28	5.9	--
JUL 29...	7.5	499	18	2.0	3.4	1.3	4.7	--	6.7	.28	4.6	--
AUG 09...	11	337	6	.96	4.1	1.4	5.5	--	6.5	.34	5.0	--
SEP 13...	6.3	553	10	1.8	9.4	.60	10	--	12	.57	6.8	--

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	SUSPENDED ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)
OCT 14...	1000	110	90	20	2	--	--	8	140	1
NOV 29...	1130	--	--	--	4	1	3	--	--	--
FEB 17...	1100	--	--	--	1	0	1	--	--	0
MAY 10...	1100	--	--	--	2	1	1	--	--	0
AUG 09...	1240	--	--	--	--	--	8	--	--	--

DATE	SUSPENDED CADMIUM (CD) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM (CR) (UG/L)	SUSPENDED CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CU) (UG/L)	SUSPENDED COBALT (CO) (UG/L)
OCT 14...	--	--	0	--	--	--	19	0	0	--
NOV 29...	--	0	--	--	--	14	--	--	--	--
FEB 17...	0	0	--	20	17	3	--	--	0	0
MAY 10...	0	0	--	<10	<2	8	--	--	0	0
AUG 09...	--	0	--	--	--	5	--	--	--	--

DATE	DISSOLVED COBALT (CC) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	SUSPENDED COPPER (CU) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)
OCT 14...	--	0	10	--	--	5	470	80	5500	11
NOV 29...	0	--	--	--	9	--	--	110	--	--
FEB 17...	0	--	11	4	7	--	510	140	--	14
MAY 10...	0	--	5	1	4	--	430	140	--	6
AUG 09...	0	--	--	--	10	--	--	50	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	SUSPENDED LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)	SUSPENDED MERCURY (HG) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)
OCT 14...	--	--	24	150	--	--	140	<.5	--	--
NOV 29...	--	2	--	--	--	90	--	.1	.1	.0
FEB 17...	9	5	--	170	10	160	--	.0	.0	.0
MAY 10...	4	2	--	100	0	100	--	.0	.0	.0
AUG 09...	--	7	--	--	--	200	--	--	--	--

DATE	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	SUSPENDED SELENIUM (SE) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUSPENDED ZINC (ZN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)
OCT 14...	.0	3	0	0	--	--	20	--	--	53
NOV 29...	--	--	--	0	0	0	--	--	30	--
FEB 17...	--	--	--	0	0	0	20	0	20	--
MAY 10...	--	--	--	0	0	0	20	10	10	--
AUG 09...	--	--	--	--	--	0	--	--	20	--

DATE	TIME	PCB IN BOTTOM MATERIAL (UG/KG)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ATRAZINE (UG/L)	ATRAZINE IN BOTTOM MATERIAL (UG/KG DRY SOLIDS)	TOTAL CHLORDANE (UG/L)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	P,P' DDD IN BOTTOM MATERIAL (UG/KG)
OCT 14...	1000	8	--	.0	--	--	--	7	--	1.4	--
NOV 29...	1130	--	ND	ND	ND	ND	ND	6	ND	--	.7
FEB 17...	1100	--	ND	--	ND	--	ND	--	ND	--	--
MAY 10...	1100	--	ND	ND	ND	ND	ND	0	ND	--	.7
AUG 09...	1240	--	ND	--	ND	--	ND	--	ND	--	--

DATE	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	P,P' DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)	P,P' DDT IN BOTTOM MATERIAL (UG/KG)	TOTAL DIAZINON (UG/L)	DIAZINON IN BOTTOM MATERIAL (UG/KG)	TOTAL DIELDRIN (UG/L)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)
OCT 14...	--	.8	--	--	.0	--	--	--	--	1.3	--
NOV 29...	ND	--	.4	ND	--	.7	ND	ND	ND	ND	ND
FEB 17...	ND	--	--	ND	--	--	ND	--	.01	--	ND
MAY 10...	ND	--	.4	ND	--	.6	ND	ND	ND	ND	ND
AUG 09...	ND	--	--	ND	--	--	--	--	ND	--	ND

01404100 RARITAN RIVER NEAR SOUTH BOUND BROOK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL MALATHION (UG/L)	MALATHION IN BOTTOM MATERIAL (UG/KG)
OCT											
14...	.0	--	--	--	.0	--	.0	--	.0	--	--
NOV											
29...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB											
17...	--	ND	--	ND	--	ND	--	ND	--	ND	--
MAY											
10...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG											
09...	--	--	--	ND	--	ND	--	ND	--	--	--

DATE	TOTAL METHOXYCHLOR (UG/L)	METHOXYCHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL METHYL PARATHION (UG/L)	METHYL PARATHION IN BOTTOM MATERIAL (UG/KG)	TOTAL METHYL TRITHION (UG/L)	METHYL TRITHION IN BOTTOM MATERIAL (UG/KG)	TOTAL PARATHION (UG/L)	PARATHION IN BOTTOM MATERIAL (UG/KG)	SIMAZINE TOTAL COULSON COND. (UG/L)	SIMAZINE IN BOTTOM MATERIAL (UG/KG DRY SOLIDS)
OCT										
14...	--	--	--	--	--	--	--	--	--	--
NOV										
29...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB										
17...	ND	--	ND	--	ND	--	ND	--	ND	--
MAY										
10...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG										
09...	ND	--	--	--	--	--	--	--	ND	--

DATE	TOTAL TOXAPHENE (UG/L)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)	TOTAL TRITHION (UG/L)	TRITHION IN BOTTOM MATERIAL (UG/KG)	TOTAL 2,4-D (UG/L)	2,4-D IN BOTTOM MATERIAL (UG/KG)	TOTAL 2,4,5-T (UG/L)	2,4,5-T IN BOTTOM MATERIAL (UG/KG)	TOTAL SILVEX (UG/L)	SILVEX IN BOTTOM MATERIAL (UG/KG)
OCT										
14...	--	0	--	--	--	--	--	--	--	--
NOV										
29...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB										
17...	ND	--	ND	--	ND	--	ND	--	ND	--
MAY										
10...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG										
09...	ND	--	--	--	ND	--	ND	--	ND	--

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT						
14...	1000	248	11.0	13	8.7	87
NOV						
29...	1130	279	7.0	5	3.8	100
DEC						
27...	0930	202	.0	6	3.3	76
JAN						
24...	1230	196	.0	6	3.2	100
FEB						
17...	1100	663	.5	3	5.4	100
MAR						
31...	1400	1300	15.5	4	14	100
APR						
26...	1315	1110	13.0	12	36	100
MAY						
10...	1100	914	12.0	9	22	100
JUN						
09...	1320	699	17.5	27	51	83
JUL						
29...	0940	190	21.5	22	11	83
AUG						
05...	1240	327	27.0	6	5.3	100
SEP						
13...	0945	144	19.0	4	1.6	100

01404100 RARITAN RIVER NEAR SOUTH BOUND BROOK, NJ--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

PERIPHYTON

Date	Length of exposure (days)	Biomass (mg/m²) Dry weight	Biomass (mg/m²) Ash weight	Chlorophyll a* (mg/m²)	Chlorophyll b* (mg/m²)	Biomass chlorophyll ratio	Sampling method
Nov 29	38	5154	4615	1.23	0.313	438	Polyethylene strip
Jun 09	44	1730	472	0.507	1.14	2480	
Jul 29	49	2680	1650	0.142	0.061	7250	

* Chlorophyll determinations in November were performed using the chromatographic-spectrophotometric technique, in June and July determinations were performed using the chromatographic-fluorometric technique.

PHYTOPLANKTON ANALYSES

DATE	OCT 14,76		NOV 29,76		DEC 27,76		JAN 24,77		FEB 17,77	
TIME	1245		1130		0930		1230		1100	
TOTAL CELLS/ML	13000		2800		2000		790		2000	
DIVERSITY: DIVISION	0.5		1.2		1.5		1.4		1.2	
.CLASS	0.5		1.2		1.5		1.4		1.2	
..ORDER	0.9		1.6		1.8		1.6		1.3	
...FAMILY	0.9		1.9		2.0		1.7		1.7	
....GENUS	0.9		2.0		2.1		1.7		1.8	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...CHARACIACEAE										
....SCHROEDERIA	--	-	--	-	--	-	--	-	--	-
...COELASTRACEAE										
....COELASTRUM	--	-	--	-	--	-	--	-	--	-
...HYDRODICTYACEAE										
....PEDIASTRUM	--	-	--	-	--	-	--	-	*	0
...MICRACTINIACEAE										
....MICRACTINIUM	--	-	--	-	--	-	--	-	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	--	-	*	0	--	-	--	-	20	1
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-	--	-
....KIRCHNERIELLA	--	-	--	-	--	-	--	-	--	-
....OOCYSTIS	--	-	--	-	69	3	--	-	--	-
....QUADRIGULA	--	-	--	-	--	-	--	-	--	-
....SELENASTRUM	--	-	--	-	--	-	--	-	--	-
....TETRAEDRON	86	1	--	-	--	-	--	-	--	-
....WESTELLA	--	-	--	-	--	-	21	3	--	-
...SCENEDESMACEAE										
....ACTINASTRUM	--	-	--	-	--	-	--	-	--	-
....CRUCIGENIA	--	-	--	-	--	-	--	-	--	-
....SCENEDESMUS	690	5	41	1	75	4	--	-	27	1
....TETRASTRUM	--	-	--	-	--	-	--	-	--	-
..TETRASPORALES										
...PALMELLACEAE										
....SPHAEROCYSTIS	--	-	--	-	--	-	--	-	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	82	3	27	1	420#	54	82	4
...VOLVOCACEAE										
....GONIUM	--	-	--	-	--	-	--	-	54	3
....PANDORINA	--	-	--	-	--	-	--	-	--	-
..ZYGNEMATALES										
...DESMIDIACEAE										
....COSMARIUM	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01404100 RARITAN RIVER NEAR SOUTH BOUND BROOK, NJ--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977--Continued

PHYTOPLANKTON ANALYSES--Continued

DATE TIME	OCT 14,76 1245		NOV 29,76 1130		DEC 27,76 0930		JAN 24,77 1230		FEB 17,77 1100	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	--	-	--	-	59	3	16	2	27	1
....MELOSIRA	--	-	41	1	85	4	--	-	--	-
....STEPHANODISCUS	--	-	730#	26	--	-	--	-	--	-
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	--	-	--	-	--	-	--	-	14	1
....COCCONEIS	--	-	--	-	16	1	--	-	--	-
....RHOICOSPHENIA	--	-	--	-	--	-	--	-	--	-
...CYMBELLACEAE										
....CYMBELLA	--	-	*	0	--	-	--	-	--	-
...DIATOMACEAE										
....DIATOMA	--	-	200	7	--	-	--	-	14	1
...FRAGILARIACEAE										
....ASTERIONELLA	--	-	--	-	--	-	--	-	20	1
....FRAGILARIA	--	-	--	-	75	4	--	-	--	-
....SYNEDRA	--	-	*	0	--	-	--	-	14	1
...GOMPHONEMATACEAE										
....GOMPHONEMA	--	-	*	0	--	-	--	-	--	-
...NAVICULACEAE										
....NAVICULA	340	3	41	1	43	2	10	1	82	4
....PINNULARIA	--	-	--	-	--	-	--	-	--	-
...NITZSCHIACEAE										
....NITZSCHIA	--	-	82	3	80	4	16	2	120	6
...SURIRELLACEAE										
....SURIRELLA	--	-	21	1	--	-	--	-	--	-
.XANTHOPHYCEAE										
..HETEROCOCCALES										
...CHLOROTHECIACEAE										
....OPHIOCYTIUM	--	-	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....AGMENELLUM	--	-	--	-	--	-	--	-	--	-
....ANACYSTIS	940	7	--	-	--	-	--	-	--	-
....COCCOCHLORIS	--	-	--	-	--	-	--	-	--	-
..HORMOGONALES										
...NOSTOCACEAE										
....ANABAENA	--	-	--	-	--	-	--	-	--	-
....APHANIZOMENON	--	-	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE										
....LYNGBYA	--	-	--	-	--	-	--	-	27	1
....OSCILLATORIA	11000#	84	1600#	55	1300#	66	260#	33	1400#	72
....SPIRULINA	--	-	--	-	--	-	5	1	--	-
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....GOMPHOSPHAERIA	--	-	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.CRYPTOPHYCEAE										
..CRYPTOMONIDALES										
...CRYPTOMONODACEAE										
....CRYPTOMONAS	--	-	--	-	48	2	--	-	--	-
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....EUGLENA	--	-	--	-	16	1	--	-	--	-
....TRACHELOMONAS	--	-	*	0	80	4	36	5	34	2
PYRRHOPHYTA (FIRE ALGAE)										
.DINOPHYCEAE										
..PERIDINIALES										
...PERIDINIACEAE										
....PERIDINIUM	--	-	--	-	16	1	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01404100 RARITAN RIVER NEAR SOUTH BOUND BROOK, NJ--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977--Continued

PHYTOPLANKTON ANALYSES--Continued

DATE	MAY 10,77	JUN 9,77	JUL 29,77	AUG 9,77	SEP 13,77
TIME	1100	1320	0940	1240	0945
TOTAL CELLS/ML	2200	6400	3900	63000	5300
DIVERSITY: DIVISION	1.3	1.5	1.3	0.8	1.5
.CLASS	1.3	1.5	1.4	0.8	1.5
..ORDER	2.1	2.0	2.0	1.1	1.7
...FAMILY	2.6	2.9	2.8	1.6	1.9
....GENUS	3.0	3.5	3.0	1.8	2.3

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...CHARACIACEAE										
....SCHROEDERIA	--	-	--	-	--	-	*	0	--	-
...COELASTRACEAE										
....COELASTRUM	--	-	900	14	650#	16	--	-	--	-
...HYDRODICTYACEAE										
....PEDIASTRUM	--	-	130	2	--	-	--	-	--	-
...MICRACTINIACEAE										
....MICRACTINIUM	17	1	--	-	33	1	--	-	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	140	6	290	5	99	2	*	0	110	2
....DICTYOSPHAERIUM	68	3	130	2	--	-	--	-	--	-
....KIRCHNERIELLA	--	-	--	-	66	2	--	-	110	2
....OOCYSTIS	--	-	310	5	33	1	--	-	--	-
....QUADRIGULA	--	-	--	-	--	-	--	-	33	1
....SELENASTRUM	17	1	--	-	--	-	--	-	--	-
....TETRAEDRON	17	1	--	-	*	0	--	-	*	0
....WESTELLA	--	-	--	-	--	-	--	-	--	-
...SCENEDESMACEAE										
....ACTINASTRUM	--	-	--	-	--	-	600	1	--	-
....CRUCIGENIA	--	-	--	-	--	-	840	1	--	-
....SCENEDESMUS	200	9	1300#	20	770#	20	720	1	560	10
....TETRASTRUM	--	-	90	1	--	-	--	-	--	-
..TETRASPORALES										
...PALMELLACEAE										
....SPHAEROCYSTIS	--	-	--	-	--	-	8500	13	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	150	7	--	-	41	1	--	-	--	-
...VOLVOCACEAE										
....GONIUM	--	-	--	-	--	-	--	-	--	-
....PANDORINA	*	0	--	-	--	-	--	-	--	-
..ZYGNEMATALES										
...DESMIDIACEAE										
....COSMARIUM	--	-	--	-	--	-	*	0	--	-
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	780#	36	340	5	41	1	*	0	--	-
....MELOSIRA	120	6	1100#	16	*	0	*	0	1800#	33
....STEPHANODISCUS	--	-	--	-	*	0	--	-	*	0
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	--	-	--	-	--	-	--	-	--	-
....COCCONEIS	--	-	--	-	--	-	--	-	--	-
....RHOICOSPHENIA	*	0	--	-	--	-	--	-	--	-
...CYMBELLACEAE										
....CYMBELLA	--	-	--	-	--	-	--	-	--	-
...DIATOMACEAE										
....DIATOMA	*	0	--	-	--	-	--	-	--	-
...FRAGILARIACEAE										
....ASTERIONELLA	*	0	--	-	--	-	--	-	--	-
....FRAGILARIA	--	-	110	2	--	-	--	-	--	-
....SYNEDRA	85	4	67	1	--	-	*	0	*	0
...GOMPHONEMATACEAE										
....GOMPHONEMA	--	-	*	0	*	0	--	-	49	1
...NAVICULACEAE										
....NAVICULA	310	14	180	3	25	1	*	0	65	1
....PINNULARIA	*	0	--	-	--	-	--	-	--	-
...NITZSCHIACEAE										
....NITZSCHIA	68	3	67	1	33	1	*	0	150	3
...SURIRELLACEAE										
....SURIRELLA	*	0	--	-	--	-	--	-	--	-
.XANTHOPHYCEAE										
..HETEROCOCCALES										
...CHLOROTHECIACEAE										
....OPHIOCYTIUM	--	-	--	-	*	0	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01404100 RARITAN RIVER NEAR SOUTH BOUND BROOK, NJ--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977--Continued

PHYTOPLANKTON ANALYSES--Continued

DATE TIME	MAY 10,77 1100		JUN 9,77 1320		JUL 29,77 0940		AUG 9,77 1240		SEP 13,77 0945	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....AGMENELLUM	--	-	--	-	--	-	--	-	330	6
....ANACYSTIS	--	-	700	11	1000#	26	--	-	2100#	40
....COCCOCHLORIS	--	-	90	1	--	-	--	-	--	-
..HORMOGONALES										
...NOSTOCACEAE										
....ANABAENA	--	-	--	-	--	-	6700	11	--	-
....APHANIZOMENON	--	-	--	-	150	4	2200	3	--	-
...OSCILLATORIACEAE										
....LYNGBYA	--	-	--	-	--	-	--	-	--	-
....OSCILLATORIA	170	8	670	10	720#	18	41000#	65	--	-
....SPIRULINA	--	-	--	-	--	-	--	-	--	-
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....GOMPHOSPHAERIA	--	-	--	-	66	2	1700	3	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.CRYPTOPHYCEAE										
..CRYPTOMONADALES										
...CRYPTOMONADACEAE										
....CRYPTOMONAS	--	-	*	0	*	0	--	-	--	-
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....EUGLENA	17	1	--	-	58	1	--	-	*	0
....TRACHELOMONAS	*	0	--	-	41	1	*	0	--	-
PYRRHOPHYTA (FIRE ALGAE)										
.DINOPHYCEAE										
..PERIDINIALES										
...PERIDINIACEAE										
....PERIDINIUM	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM, EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	838	616	753	282	268	276	939	645	719	771	665	704
2	750	500	608	331	293	309	1140	806	916	696	530	610
3	674	464	551	379	337	352	1430	678	863	605	483	541
4	500	424	456	434	374	393	809	661	745	661	505	558
5	510	434	470	501	411	445	815	545	639	770	666	705
6	688	542	599	493	423	450	902	666	767	952	742	795
7	933	685	817	498	408	442	884	274	559	1070	844	953
8	1120	891	1030	499	409	454	273	237	263	892	746	819
9	1160	332	716	499	439	470	368	269	307	884	636	768
10	376	330	356	598	448	502	338	300	321	838	626	722
11	507	401	434	604	510	556	387	333	354	716	442	535
12	671	517	574	667	565	609	443	397	407	512	432	459
13	718	606	639	694	614	645	467	381	422	644	490	563
14	817	655	713	705	583	642	914	482	652	696	574	636
15	899	757	824	681	589	645	707	492	603	692	560	615
16	1050	806	913	730	502	671	657	535	593	650	516	569
17	1160	918	1060	788	682	728	687	597	623	698	586	628
18	1130	957	1030	806	690	755	717	635	667	704	676	---
19	1200	881	1080	862	732	812	855	663	720	---	---	---
20	1230	554	1070	891	763	827	699	609	640	676	628	---
21	452	294	333	889	749	829	731	432	539	764	678	724
22	366	282	321	854	738	813	681	443	610	806	728	770
23	454	364	403	896	844	875	595	427	520	858	676	772
24	446	392	413	1060	957	997	574	460	525	802	705	773
25	434	370	398	1120	833	966	589	475	520	791	673	724
26	374	284	318	964	708	804	544	406	453	799	725	756
27	330	286	316	780	624	686	562	446	529	875	769	839
28	395	325	342	817	669	753	587	501	528	941	867	903
29	494	358	419	750	704	737	567	501	532	999	813	905
30	597	451	489	729	595	656	726	544	619	1010	893	955
31	573	269	406	---	---	---	756	612	687	989	843	908
MONTH	1230	269	608	1120	268	638	1430	237	575	1070	432	722

01404100 RARITAN RIVER NEAR SOUTH BOUND BROOK, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	869	701	779	278	248	258						
2	983	803	882	299	269	285						
3	1030	850	925	337	287	303						
4	917	831	880	333	223	297						
5	1030	857	916	219	201	209						
6	1040	898	957	250	216	235						
7	1090	934	1010	272	250	259						
8	1230	943	1070	302	270	284						
9	1220	911	1150	314	286	299						
10	1400	1180	1300	331	275	297						
11	1400	1130	1280	343	299	320						
12	1150	613	821	353	307	332						
13	605	453	497	348	194	297						
14	425	367	386	200	152	169						
15	387	345	372	242	180	217						
16	396	360	373	260	230	243						
17	440	368	386	281	251	268						
18	506	430	460	294	248	277						
19	502	426	471	270	244	255						
20	496	394	457	278	264	272						
21	542	452	484	292	268	259						
22	578	516	542	300	292	---						
23	612	516	555	---	---	---						
24	526	318	413	---	---	---						
25	---	---	---	---	---	---						
26	---	---	---	---	---	---						
27	---	---	---	---	---	---						
28	252	246	---	---	---	---						
29	---	---	---	---	---	---						
30	---	---	---	---	---	---						
31	---	---	---	---	---	---						
MONTH	1400	246	724	---	---	---						

PH (UNITS), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.0	6.7	6.8	7.5	7.2	7.4	7.6	7.3	7.5	7.4	7.1	7.2
2	6.9	6.7	6.8	7.5	7.2	7.3	7.6	7.3	7.5	7.5	7.1	7.2
3	6.8	6.6	6.7	7.5	7.2	7.3	7.6	7.4	7.5	7.5	7.1	7.3
4	7.0	6.6	6.8	7.5	7.2	7.3	7.8	7.5	7.6	7.4	7.1	7.2
5	7.0	6.7	6.8	7.4	7.1	7.2	7.8	7.4	7.7	7.5	7.2	7.4
6	6.8	6.5	6.7	7.4	7.1	7.3	7.7	7.3	7.5	7.5	7.2	7.3
7	6.9	6.5	6.7	7.5	7.1	7.3	7.5	7.2	7.4	7.4	7.2	7.4
8	6.9	6.6	6.8	7.5	7.2	7.3	7.3	7.2	7.3	7.5	7.2	7.3
9	6.9	6.4	6.7	7.4	7.2	7.3	7.3	7.1	7.2	7.5	7.2	7.3
10	6.7	6.4	6.6	7.5	7.1	7.3	7.4	7.2	7.3	7.5	7.2	7.3
11	6.8	6.4	6.6	7.5	7.1	7.4	7.3	7.2	7.3	7.3	7.1	7.2
12	6.8	6.4	6.7	7.5	7.2	7.4	7.3	7.1	7.2	7.1	6.9	7.0
13	7.0	6.6	6.8	7.6	7.3	7.4	7.3	7.2	7.2	7.2	6.9	7.1
14	7.0	6.5	6.9	7.6	7.2	7.5	7.3	7.0	7.2	7.2	7.0	7.1
15	7.1	6.8	6.9	7.6	7.2	7.5	7.3	7.1	7.2	7.3	7.0	7.1
16	7.1	6.7	7.0	7.6	7.3	7.5	7.3	7.1	7.2	7.2	7.1	7.1
17	7.2	6.8	7.0	7.7	7.3	7.6	7.4	7.2	7.3	7.1	6.8	6.9
18	7.1	6.6	6.9	7.6	7.2	7.4	7.5	7.2	7.3	6.9	6.8	---
19	7.1	6.8	7.0	7.6	7.2	7.4	7.5	7.2	7.3	---	---	---
20	7.1	6.7	6.9	7.6	7.4	7.5	7.4	7.2	7.3	7.2	7.0	---
21	7.4	7.1	7.3	7.7	7.3	7.5	7.3	7.2	7.2	7.2	7.0	7.1
22	7.3	7.0	7.2	7.6	7.4	7.5	7.3	7.1	7.3	7.2	7.0	7.1
23	7.4	7.0	7.2	7.7	7.4	7.5	7.4	7.2	7.3	7.3	7.0	7.1
24	7.4	6.7	7.1	7.7	7.4	7.6	7.4	7.2	7.3	7.3	7.0	7.2
25	6.8	6.4	6.7	7.7	7.4	7.6	7.4	7.1	7.3	7.2	6.9	7.0
26	7.4	6.5	7.2	7.7	7.3	7.5	7.4	7.1	7.2	7.2	6.9	7.1
27	7.4	7.1	7.3	7.6	7.3	7.4	7.4	7.1	7.3	7.2	6.8	7.0
28	7.6	7.1	7.3	7.6	7.4	7.5	7.3	7.1	7.2	7.1	6.9	7.0
29	7.6	7.2	7.5	7.6	7.5	7.5	7.4	7.1	7.2	7.0	6.9	6.9
30	7.6	7.3	7.4	7.5	7.3	7.5	7.4	7.1	7.3	7.0	6.8	6.9
31	7.5	7.3	7.4	---	---	---	7.4	7.1	7.3	7.0	6.8	6.9
MONTH	7.6	6.4	7.0	7.7	7.1	7.4	7.8	7.0	7.3	7.5	6.8	7.1

01404100 RARITAN RIVER NEAR SOUTH BOUND BROOK, NJ--Continued

PH (UNITS), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.1	6.8	7.0	6.8	6.4	6.7						
2	7.1	6.8	7.0	6.8	6.5	6.7						
3	7.1	6.9	7.0	6.9	6.4	6.7						
4	7.1	6.9	7.0	7.0	6.6	6.8						
5	7.2	7.1	7.1	6.8	6.4	6.6						
6	7.1	6.9	7.0	6.8	6.5	6.7						
7	7.0	6.8	6.9	6.9	6.5	6.8						
8	7.2	6.9	7.0	6.9	6.6	6.8						
9	7.1	6.9	7.1	6.9	6.6	6.8						
10	7.2	6.9	7.1	7.0	6.5	6.8						
11	7.2	6.9	7.1	7.0	6.6	6.8						
12	7.3	7.0	7.2	7.0	6.7	6.9						
13	7.2	6.9	7.0	7.3	6.7	6.9						
14	7.2	6.8	7.0	6.8	6.4	6.6						
15	7.2	6.9	7.1	6.9	6.4	6.6						
16	7.3	6.9	7.1	7.0	6.5	6.8						
17	7.2	7.0	7.1	6.9	6.6	6.8						
18	7.2	7.0	7.1	7.0	6.8	6.9						
19	7.3	7.0	7.2	6.9	6.6	6.8						
20	7.4	7.2	7.3	7.0	6.7	6.9						
21	7.3	7.1	7.2	7.1	6.8	6.9						
22	7.3	7.1	7.3	7.1	6.9	---						
23	7.4	7.1	7.3	---	---	---						
24	7.4	7.1	7.3	---	---	---						
25	---	---	---	---	---	---						
26	---	---	---	---	---	---						
27	---	---	---	---	---	---						
28	6.7	6.5	---	---	---	---						
29	---	---	---	---	---	---						
30	---	---	---	---	---	---						
31	---	---	---	---	---	---						
MONTH	7.4	6.5	7.1	---	---	---						

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	17.0	16.0	16.5	11.0	9.0	10.5	---	---	---	1.0	0.5	0.5
2	16.5	15.0	16.0	9.0	6.5	8.0	---	---	---	1.0	0.5	1.0
3	16.0	15.5	15.5	9.0	6.5	8.0	---	---	---	1.0	0.5	1.0
4	18.5	15.0	16.5	11.0	8.0	9.5	---	---	---	2.0	1.0	1.5
5	17.0	16.0	16.5	10.0	8.0	9.5	---	---	---	2.0	1.0	1.5
6	18.0	16.0	17.0	9.5	6.0	8.0	---	---	---	1.5	0.5	1.0
7	20.5	18.0	19.0	9.5	6.0	8.0	---	---	---	1.5	1.0	1.5
8	21.5	20.0	21.0	9.0	4.0	6.5	---	---	---	1.0	0.0	0.5
9	23.0	20.5	22.0	5.0	1.5	3.5	---	---	---	1.5	0.0	1.0
10	20.5	17.0	18.5	7.0	4.5	5.5	1.0	0.0	---	1.5	0.5	0.5
11	17.0	14.5	15.5	7.0	4.5	6.0	2.0	1.0	1.5	0.5	0.0	0.5
12	15.5	12.5	14.0	8.0	5.0	6.5	2.5	2.0	2.0	0.5	0.0	0.5
13	15.0	13.0	---	6.0	3.5	5.0	2.5	0.0	1.5	0.5	0.0	0.5
14	---	---	---	6.0	2.0	4.5	1.0	0.0	0.5	0.5	0.5	0.5
15	---	---	---	6.5	2.0	4.5	2.0	0.5	1.0	1.0	0.5	0.5
16	---	---	---	7.0	2.5	5.0	2.5	1.0	1.5	1.0	0.0	0.5
17	---	---	---	7.5	3.0	5.5	2.5	1.5	2.0	0.5	0.0	0.5
18	---	---	---	8.0	4.5	6.5	2.5	2.0	2.0	---	---	---
19	---	---	---	9.0	4.5	7.0	3.0	1.5	2.0	---	---	---
20	14.5	11.5	12.5	8.0	6.0	7.0	3.0	2.0	2.5	---	---	---
21	14.0	12.0	13.0	6.5	4.0	5.0	3.5	1.0	2.5	1.0	0.0	0.5
22	12.5	10.0	11.5	4.5	2.0	---	1.5	0.5	1.0	1.0	0.0	0.5
23	11.0	8.5	10.0	---	---	---	2.0	1.0	1.5	1.5	0.5	0.5
24	11.0	9.5	10.0	---	---	---	1.5	1.0	1.0	1.5	0.0	0.5
25	13.5	11.5	12.0	---	---	---	2.0	0.5	1.0	2.0	0.0	1.0
26	14.5	12.0	13.5	---	---	---	2.0	1.0	1.5	2.0	0.5	1.5
27	12.0	9.0	10.5	---	---	---	1.0	0.5	1.0	2.0	0.5	1.5
28	10.0	7.0	8.5	---	---	---	1.5	1.0	1.0	2.0	0.0	1.0
29	9.5	6.0	8.0	---	---	---	2.0	1.0	1.5	1.5	0.0	0.5
30	10.5	6.5	8.5	---	---	---	1.0	0.5	1.0	1.0	0.0	0.5
31	12.0	9.5	10.5	---	---	---	1.0	0.5	1.0	1.0	0.0	0.5
MONTH	23.0	6.0	---	---	---	---	---	---	---	2.0	0.0	1.0

01404100 RARITAN RIVER NEAR SOUTH BOUND BROOK, NJ--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1.0	0.0	0.5	5.0	4.0	4.5						
2	1.0	0.0	0.5	5.0	4.0	4.5						
3	1.5	0.0	1.0	5.5	3.5	4.5						
4	2.0	0.5	1.5	5.5	4.0	5.0						
5	2.0	1.0	1.5	7.5	5.5	6.5						
6	1.0	0.0	0.5	7.5	6.5	7.0						
7	1.5	0.0	0.5	7.5	6.5	6.5						
8	1.5	0.5	1.0	8.0	6.0	7.0						
9	2.0	0.0	1.0	8.5	6.5	7.5						
10	3.0	1.5	2.0	10.0	7.0	8.5						
11	3.5	1.5	2.5	11.0	8.5	10.0						
12	2.5	0.5	1.5	11.5	9.5	10.5						
13	2.5	0.0	1.0	11.5	10.0	10.5						
14	2.5	0.5	1.5	11.0	10.0	10.5						
15	2.0	0.0	1.0	11.0	9.5	10.0						
16	1.5	0.0	0.5	11.5	10.0	10.5						
17	1.5	0.0	0.5	11.0	9.5	10.0						
18	3.0	0.0	1.0	9.0	6.5	8.0						
19	2.5	0.0	1.0	7.5	6.0	6.5						
20	3.5	0.0	1.0	7.0	6.5	6.5						
21	3.0	0.0	2.0	8.0	5.5	7.0						
22	3.0	0.0	2.0	7.5	7.0	---						
23	4.5	2.0	3.0	---	---	---						
24	3.0	1.5	2.0	---	---	---						
25	---	---	---	---	---	---						
26	---	---	---	---	---	---						
27	---	---	---	---	---	---						
28	5.5	4.5	---	---	---	---						
29	---	---	---	---	---	---						
30	---	---	---	---	---	---						
31	---	---	---	---	---	---						
MONTH	5.5	0.0	1.5	---	---	---						

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.8	5.5	6.1	10.4	10.1	10.3	11.9	11.2	11.5	15.4	14.5	14.9
2	7.5	6.2	6.8	10.7	10.3	10.5	11.9	11.2	11.6	15.1	14.5	14.8
3	7.5	6.5	7.0	10.7	10.2	10.6	13.0	12.0	12.5	15.2	14.7	14.9
4	8.3	6.8	7.4	10.3	9.7	10.1	13.6	13.0	13.3	15.0	14.4	14.7
5	7.8	6.6	7.2	10.0	9.6	9.7	13.6	13.3	13.5	14.7	14.1	14.4
6	7.5	5.8	6.5	10.4	9.4	9.8	13.4	12.7	13.1	14.6	14.1	14.3
7	6.7	5.3	5.9	10.3	9.8	10.0	12.8	12.1	12.6	14.2	13.6	13.9
8	5.9	4.8	5.3	10.6	9.9	10.2	13.6	12.3	13.1	14.6	13.6	14.0
9	6.5	5.3	5.7	10.9	10.6	10.7	13.7	13.2	13.5	14.2	13.5	13.9
10	7.5	5.6	6.7	11.0	10.6	10.7	13.6	13.3	13.5	14.0	13.5	13.8
11	8.4	7.1	8.0	11.2	10.7	10.9	13.4	12.8	13.1	14.0	13.4	13.7
12	8.3	7.6	8.0	11.8	9.7	10.7	12.7	12.2	12.4	14.8	13.8	14.3
13	8.3	7.4	7.8	11.2	9.3	10.1	13.2	12.1	12.6	14.7	13.9	14.3
14	8.2	7.1	7.6	11.4	10.6	11.0	13.6	12.5	13.1	14.4	13.6	13.9
15	8.2	7.4	7.8	11.5	10.7	11.0	13.5	13.0	13.3	13.8	13.0	13.4
16	8.2	6.7	7.3	11.3	10.6	10.8	13.4	13.2	13.3	14.0	13.4	13.7
17	7.9	7.0	7.5	11.3	10.7	11.0	13.4	13.2	13.2	14.5	13.3	14.0
18	8.7	7.7	8.1	11.0	10.4	10.8	13.5	13.3	13.4	14.6	14.3	---
19	9.0	8.2	8.5	11.0	10.0	10.6	13.7	13.3	13.6	---	---	---
20	9.2	7.8	8.4	10.5	9.9	10.3	14.0	13.6	13.8	13.5	13.2	---
21	9.4	8.1	8.9	10.7	10.0	10.3	14.7	13.5	13.9	13.9	13.1	13.4
22	10.3	9.4	9.8	11.2	10.3	10.7	14.8	13.7	14.4	13.9	13.1	13.4
23	10.3	9.7	10.0	11.4	10.7	11.0	14.8	14.3	14.5	14.1	13.2	13.6
24	10.0	9.7	9.9	11.7	11.0	11.3	14.7	14.4	14.6	14.2	13.6	12.9
25	9.7	9.1	9.5	11.6	10.9	11.2	15.0	14.5	14.8	14.1	13.3	13.6
26	9.4	9.0	9.2	11.8	11.1	11.4	14.6	14.3	14.5	13.7	13.0	13.3
27	9.9	9.2	9.6	11.6	10.8	11.1	14.6	14.1	14.4	13.6	12.7	13.0
28	10.5	9.8	10.2	11.0	9.9	10.4	14.6	14.1	14.3	13.2	12.7	13.0
29	10.7	10.3	10.5	10.5	9.2	10.2	14.6	14.1	14.3	13.9	13.0	13.4
30	10.9	10.5	10.6	11.7	10.4	10.8	14.9	14.5	14.7	14.1	12.9	13.5
31	10.8	10.2	10.5	---	---	---	15.1	14.3	14.6	14.2	12.8	13.6
MONTH	10.9	4.8	8.1	11.8	9.2	10.6	15.1	11.2	13.5	15.4	12.7	13.8

01404100 RARITAN RIVER NEAR SOUTH BOUND BROOK, NJ--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	14.0	12.9	13.4	12.7	12.4	12.6						
2	13.9	12.8	13.3	12.7	12.5	12.6						
3	13.6	12.5	12.7	12.8	12.4	12.6						
4	12.6	11.9	12.2	12.4	12.1	12.3						
5	12.8	11.8	12.3	12.4	11.0	11.7						
6	12.9	12.0	12.5	11.6	10.9	11.1						
7	13.1	11.6	12.4	11.3	11.1	11.2						
8	13.0	11.9	12.4	11.4	11.2	11.3						
9	13.0	11.7	12.4	11.4	10.8	11.0						
10	12.2	11.5	11.9	10.9	10.1	10.6						
11	12.1	11.6	11.9	10.2	9.8	10.0						
12	12.3	11.8	12.1	9.9	9.6	9.8						
13	12.3	12.0	12.2	9.8	9.0	9.4						
14	12.7	12.2	12.5	10.4	9.2	10.2						
15	12.7	12.4	12.6	10.5	10.0	10.3						
16	12.8	12.5	12.7	10.4	10.0	10.3						
17	13.3	12.5	13.0	10.6	10.2	10.4						
18	13.3	12.9	13.1	10.8	10.3	10.5						
19	13.1	12.7	12.9	11.3	10.8	11.1						
20	12.8	12.5	12.6	11.3	11.1	11.2						
21	13.1	12.4	12.6	11.5	11.2	11.3						
22	12.9	12.6	12.7	11.5	10.9	---						
23	12.8	12.2	12.5	---	---	---						
24	12.8	12.4	12.5	---	---	---						
25	---	---	---	---	---	---						
26	---	---	---	---	---	---						
27	---	---	---	---	---	---						
28	12.6	12.4	---	---	---	---						
29	---	---	---	---	---	---						
30	---	---	---	---	---	---						
31	---	---	---	---	---	---						
MONTH	14.0	11.5	12.6	---	---	---						

01404170 RARITAN RIVER AT LANDING LANE AT NEW BRUNSWICK, NJ

LOCATION.--Lat 40°28'01", long 74°27'51", Middlesex County, Hydrologic Unit 02030105, at bridge on Landing Lane in New Brunswick, 0.2 mi (0.3 km) downstream from Mile Run, and 3.0 mi (4.8 km) southwest of North Stelton.

DRAINAGE AREA.--894 mi² (2315 km²), includes 19 mi² (49 km²) which drains into the Delaware and Raritan Canal.

PERIOD OF RECORD.--
CHEMICAL ANALYSES: October 1976 to August 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
OCT 06...	1415	522	7.2	17.0	4	7.9	1.0	790	>2400
MAY 25...	1315	725	7.5	25.0	4	7.2	4.0	790	130
JUL 11...	0905	151	7.2	20.0	4	8.2	<.5	70	130
AUG 01...	0940	685	--	23.0	2	5.2	--	170	1600

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT 06...	130	40	8.4	40	4.7	93	54	307	7
MAY 25...	190	60	9.5	60	5.3	140	91	428	1
JUL 11...	48	10	5.6	4.4	2.0	26	12	101	3
AUG 01...	190	63	8.2	52	6.8	140	78	405	16

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 06...	--	--	--	--	2.8	--	.33	--	7.6
MAY 25...	--	--	--	--	3.1	--	.27	--	8.4
JUL 11...	1.1	.00	.06	.39	.45	1.6	.02	.02	7.2
AUG 01...	2.3	.11	1.1	1.8	2.9	5.3	.19	.11	6.2

01404302 LAWRENCE BROOK AT DAVIDSONS MILL ROAD NEAR PATRICKS CORNER, NJ

LOCATION.--Lat 40°24'58", long 74°29'38", Middlesex County, Hydrologic Unit 02030105, at bridge on Davidsons Mill Road, at inflow to Farrington Lake, 1.5 mi (2.5 km) west of Paulas Corners, and 2.3 mi (3.8 km) south of Adams.

DRAINAGE AREA.--12.4 mi² (32.1 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM, .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 12...	1000	185	6.9	12.5	12	7.5	2.6	570	170	--	130	41
NOV 17...	1030	158	6.5	--	3	--	1.0	830	<2	50	<2	39
FEB 16...	1100	177	6.4	.0	3	12.3	1.8	82	4	--	49	39
MAR 28...	1125	98	5.7	8.0	8	11.6	.8	84	2	812	4	25
MAY 11...	1045	127	6.7	14.0	4	9.2	2.5	460	--	88	--	31
JUN 14...	1040	165	7.1	21.0	2	8.4	2.5	52	17	950	5	33
JUL 18...	1025	100	6.3	28.0	1	5.8	4.5	--	110	--	49	30
AUG 09...	1015	115	6.8	26.0	3	5.4	3.0	--	49	--	79	32
SEP 27...	1045	174	6.9	17.0	6	8.0	4.0	--	5	--	350	32

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT 12...	23	9.0	4.6	13	2.6	22	0	18	4.4	.0	35	13
NOV 17...	28	8.0	4.5	10	2.2	13	0	11	6.6	--	28	12
FEB 16...	32	8.3	4.4	15	2.1	9	0	7	5.7	--	26	24
MAR 28...	23	5.4	2.8	7.1	1.6	2	0	2	6.4	--	22	6.0
MAY 11...	21	6.6	3.6	9.4	1.8	12	0	10	3.8	.0	22	11
JUN 14...	11	7.1	3.6	10	1.6	27	0	22	3.4	--	29	12
JUL 18...	20	6.8	3.1	5.0	1.8	12	0	10	9.6	--	19	6.8
AUG 09...	10	7.1	3.4	7.8	2.1	27	0	22	6.8	--	17	9.5
SEP 27...	4	7.2	3.5	17	2.4	34	0	28	6.8	--	25	11

DATE	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 12...	7.5	110	16	--	--	--	--	.88	--	.75	--	6.3
NOV 17...	--	99	9	--	--	--	--	1.1	--	.03	--	2.9
FEB 16...	--	107	6	--	--	--	--	1.4	--	.05	--	7.6
MAR 28...	--	70	4	--	--	--	--	1.7	--	.18	--	--
MAY 11...	6.6	103	18	--	--	--	--	--	--	--	--	5.1
JUN 14...	--	97	3	--	--	--	--	.80	--	.02	--	5.2
JUL 18...	--	72	13	.06	.00	.14	.59	.73	.79	.06	.01	7.9
AUG 09...	--	78	14	.28	.02	.08	1.2	1.3	1.6	.10	.01	7.0
SEP 27...	--	96	0	1.1	.02	.13	.69	.82	1.9	.08	.01	9.1

01404302 LAWRENCE BROOK AT DAVIDSONS MILL ROAD NEAR PATRICKS CORNER, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
OCT									
12...	1000	500	80	2	80	0	0	1	0
MAY									
11...	1045	--	50	1	7	0	0	0	0

DATE	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
OCT									
12...	1800	300	6	180	--	3	0	30	--
MAY									
11...	--	340	17	90	.0	7	0	30	0

01405000 LAWRENCE BROOK AT FARRINGTON DAM, NJ

LOCATION.--Lat 40°27'00", long 74°27'05", Middlesex County, Hydrologic Unit 02030105, on left bank 300 ft (90 m) upstream from Farrington Dam, 0.7 mi (2.1 km) southwest of Milltown, and 5.4 mi (8.7 km) upstream from mouth.

DRAINAGE AREA.--34.4 mi² (89.1 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: May 1927 to current year.

REVISED DISCHARGE RECORDS.--WSP 781: Drainage area. WSP 1432: 1959(P).

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 25.73 ft (7.843 m) NGVD.

REMARKS.--Discharge records fair. Records given herein include flow over dam and through blowoff gates. Flow regulated by Farrington Reservoir, capacity, 655,250,000 gal (2.48 hm³).

COOPERATION.--Water-stage recorder inspected by and records of openings of blowoff gates furnished by employees of City of New Brunswick.

AVERAGE DISCHARGE.--50 years, 38.8 ft³/s (1.100 m³/s), 15.32 in/yr (389 mm/yr), adjusted.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base 450 ft³/s (12.7 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 25	0400	529	15.0	e25.27	7.702
Apr. 5	0900	511	14.5	25.27	7.702
Mar. 22	2000	*1040	29.4	25.59	7.800

e Gate open.
Minimum daily discharge, 0.98 ft³/s (0.03 m³/s) Jan. 9, Sept. 23.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,920 ft³/s (139 m³/s) July 21, 1975 (gage height, 26.93 ft or 8.208 m) from rating curve extended above 1,100 ft³/s (31 m³/s) on basis of weir formula; no flow at times when gates in dam were closed and water was below spillway.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	48	10	9.0	8.0	45	18	18	18	18	13	8.8
2	10	34	10	9.0	8.0	37	38	17	18	18	1.0	8.4
3	10	30	10	12	8.0	35	82	16	18	18	1.0	7.6
4	10	28	10	8.4	8.0	76	54	16	18	18	1.0	6.4
5	10	28	10	6.4	8.0	108	357	38	18	18	1.0	7.2
6	10	28	10	3.9	8.0	68	119	27	18	18	1.0	13
7	10	27	10	3.1	8.0	33	63	19	18	18	1.0	13
8	10	26	10	1.8	8.0	19	45	17	18	18	1.2	10
9	10	22	15	.98	8.0	18	31	17	18	18	1.2	8.8
10	10	18	13	15	8.0	16	27	17	18	18	1.6	8.4
11	10	11	14	35	8.0	15	24	16	18	18	8.8	7.6
12	10	10	14	28	8.0	15	22	15	18	18	13	6.0
13	10	10	13	25	8.0	68	20	15	18	18	17	5.2
14	10	10	12	22	4.0	104	19	14	18	18	24	4.3
15	10	10	11	22	5.6	54	19	13	18	18	20	3.1
16	10	10	11	20	15	27	18	12	18	18	17	2.7
17	10	10	11	18	16	19	18	12	18	18	15	4.3
18	10	10	11	16	14	38	17	18	18	21	15	5.2
19	10	10	10	15	11	50	17	18	18	26	14	4.8
20	10	10	10	14	10	24	17	18	18	26	13	3.9
21	10	10	15	12	9.6	22	17	18	18	26	12	3.1
22	10	10	13	10	8.8	357	17	18	18	26	27	1.4
23	10	10	11	8.8	8.0	294	16	18	18	26	22	.98
24	10	10	10	8.3	54	82	17	18	18	26	18	14
25	10	10	10	8.0	313	45	24	18	18	26	20	78
26	11	10	11	8.0	108	27	20	18	18	26	16	58
27	13	10	11	8.0	72	22	19	18	18	26	15	56
28	15	10	10	8.0	68	20	19	18	18	26	14	45
29	18	10	10	8.0	---	20	27	18	18	26	12	22
30	19	10	11	8.0	---	22	20	18	18	26	10	18
31	41	---	9.0	8.0	---	20	---	18	---	26	8.8	---
TOTAL	367	490	346.0	379.68	821.0	1800	1221	551	540	665	354.6	437.18
MEAN	11.8	16.3	11.2	12.2	29.3	58.1	40.7	17.8	18.0	21.5	11.4	14.6
MAX	41	48	15	35	313	357	357	38	18	26	27	78
MIN	10	10	9.0	.98	4.0	15	16	12	18	18	1.0	.98
(†)	+12.8	-1.60	+2.90	-2.61	+3.50	-0.3	0	-8.90	-3.30	+6.00	+5.50	+0.4
MEAN‡	24.6	12.8	14.1	9.59	32.8	57.8	40.7	8.90	14.7	27.5	16.9	15.0
CFSM‡	0.72	0.37	0.41	.28	.95	1.68	1.18	.26	.43	.80	.49	.44
IN‡	0.82	0.42	0.47	.32	.99	1.94	1.32	.30	.48	.92	.56	.49

CAL YR 1976 TOTAL 10328.00 MEAN 28.2 MAX 536 MIN 9.0 MEAN‡ 27.9 CFSM‡ 0.81 IN‡ 11.03
WTR YR 1977 TOTAL 7972.46 MEAN 21.8 MAX 357 MIN .98 MEAN‡ 22.9 CFSM‡ 0.67 IN‡ 9.03

† Change in contents, in cubic feet per second, in Farrington Reservoir.
‡ Adjusted for change in contents.

NOTE.--Blowoff gates open Oct. 1 to Dec. 7, Jan. 10 to Feb. 11, Feb. 25 to Mar. 21 and May 17 to Aug. 1.

01405030 LAWRENCE BROOK AT WESTONS MILLS, NJ

LOCATION.--Lat 40°28'59", long 74°24'45", Middlesex County, Hydrologic Unit 02030105, at bridge on Burnet Street, 200 ft (61 m) downstream from outflow of Westons Mill Pond, and 0.5 mi (0.8 km) northwest of Interchange 9 of the New Jersey Turnpike.

DRAINAGE AREA.--42.0 mi^2 (108.8 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 12...	1100	167	7.4	15.5	6	8.4	1.7	370	350	--	350	38
NOV 17...	1130	169	7.4	5.0	3	12.4	2.0	360	13	820	46	39
FEB 16...	1215	344	6.8	2.5	3	12.2	1.6	46	<2	--	240	57
MAR 28...	1245	164	6.8	8.0	10	11.8	1.7	52	2	89	4	38
MAY 11...	1210	151	7.1	16.0	3	10.0	2.7	58	--	110	--	37
JUN 14...	1125	145	6.9	19.5	2	8.4	1.3	830	1600	640	49	38
JUL 18...	1115	109	6.6	25.5	2	6.8	2.9	--	79	--	33	26
AUG 09...	1100	145	6.8	23.5	2	6.9	2.2	--	170	--	13	36
SEP 27...	1130	144	6.9	17.5	15	9.2	1.9	--	>2400	--	>2400	37

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT 12...	16	8.8	3.9	12	2.6	27	0	22	1.7	17	17
NOV 17...	21	9.5	3.8	12	3.0	22	0	18	1.4	23	17
FEB 16...	39	14	5.3	40	3.5	22	0	18	5.6	29	71
MAR 28...	30	9.1	3.8	13	2.4	10	0	8	2.5	26	20
MAY 11...	25	9.1	3.5	11	2.1	15	0	12	1.9	22	16
JUN 14...	20	9.4	3.6	11	2.1	22	0	18	4.4	19	17
JUL 18...	14	6.7	2.2	7.9	2.1	15	0	12	6.0	14	11
AUG 09...	4	9.0	3.2	11	2.6	39	0	32	9.9	17	15
SEP 27...	19	10	2.8	10	2.7	22	0	18	4.4	18	14

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 12...	95	3	--	--	--	--	.60	--	1.7	--	5.8
NOV 17...	91	10	--	--	.02	.39	.41	.53	.01	--	7.6
FEB 16...	211	5	--	--	.21	.37	.58	1.6	.01	--	8.2
MAR 28...	94	6	--	--	--	--	1.8	--	.09	--	--
MAY 11...	84	14	--	--	--	--	--	--	--	--	--
JUN 14...	74	1	--	--	--	--	1.1	--	.00	--	4.8
JUL 18...	51	0	.21	.03	.18	.41	.59	.83	.03	.01	7.5
AUG 09...	92	2	.06	.01	.14	.51	.65	.72	.03	.00	5.2
SEP 27...	81	6	.44	.02	.27	.41	.68	1.1	.06	.01	9.2

01405240 MATCHAPONIX BROOK NEAR ENGLISHTOWN, NJ

LOCATION.--Lat 40°19'21", long 74°21'35", Monmouth County, Hydrologic Unit 02030105, at bridge on Union Hill Road, 2.8 mi (4.6 km) northwest of Gordons Corner, and 2.4 mi (3.8 km) southwest of Redshaw Corner.

DRAINAGE AREA.--29.1 mi² (75.4 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
MAR									
03...	1030	250	6.1	4.0	15	8.7	2.0	<20	2
MAY									
03...	1220	216	5.8	12.0	3	11.2	2.0	<20	>2400
JUN									
21...	1210	304	5.6	18.0	2	9.0	3.0	<20	<2
JUL									
18...	1245	235	8.1	23.0	1	6.2	--	50	7
AUG									
30...	1250	302	--	19.0	7	8.2	--	20	21

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
MAR									
03...	58	15	4.9	16	3.6	50	25	150	39
MAY									
03...	51	15	3.4	13	3.3	46	19	125	5
JUN									
21...	55	16	3.7	23	4.2	50	38	196	9
JUL									
18...	66	13	8.2	13	2.9	14	34	143	1
AUG									
30...	46	12	3.9	13	4.4	89	15	151	5

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
MAR									
03...	--	--	--	--	3.4	--	.25	--	3.8
MAY									
03...	--	--	--	--	1.8	--	.01	--	--
JUN									
21...	--	--	--	--	1.5	--	.14	--	5.6
JUL									
18...	1.4	.02	.12	.51	.63	2.0	.03	.00	5.6
AUG									
30...	.43	.00	3.3	.50	3.8	4.2	.02	.00	5.9

01405285 BARCLAY BROOK NEAR ENGLISHTOWN, NJ

LOCATION.--Lat 40°20'53", long 74°21'27", Middlesex County, Hydrologic Unit 02030105, at bridge on Old Bridge-Englishtown Road, 0.6 mi (1.0 km) southwest of Redshaw Corner, and 2.3 mi (3.6 km) southwest of Moerls Corner.

DRAINAGE AREA.--4.94 mi^2 (12.79 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: September 1977.
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI (MPN)
MAR 03...	1010	245	4.1	1.5	10	14.2	2.0	<20	9
JUN 21...	1050	372	3.7	16.0	1	11.2	2.0	<20	<2
JUL 18...	1130	169	6.9	20.0	3	8.8	1.0	1300	130
AUG 30...	1135	372	3.8	17.0	4	9.3	--	70	240

DATE	HARD-NESS (CA,MG) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)
MAR 03...	34	8.3	3.1	8.9	2.6	58	12	117	4
JUN 21...	49	13	3.9	14	4.9	87	15	135	2
JUL 18...	60	15	5.4	10	1.6	15	14	108	12
AUG 30...	30	6.9	3.2	8.2	3.0	40	20	117	5

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
MAR 03...	--	--	--	--	1.7	--	.01	--	2.4
JUN 21...	--	--	--	--	4.8	--	.01	--	5.9
JUL 18...	.05	.01	.12	.37	.49	.55	.08	.01	6.1
AUG 30...	1.1	.02	.76	.44	1.2	2.3	.07	.03	7.1

01405302 MATCHAPONIX BROOK AT MUNDY AVENUE AT SPOTSWOOD, NJ

LOCATION.--Lat 40°23'22", long 74°22'55", Middlesex County, Hydrologic Unit 02030105, at bridge on Mundy Avenue, 0.5 mi (0.8 km) east of De Voe Lake dam, and 3.4 mi (5.5 km) southeast of Tanners Corners.

DRAINAGE AREA.--44.1 mi^2 (114.2 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
MAR 31...	1350	154	5.5	6.0	6	11.8	.5	<20	6
MAY 03...	1045	213	5.7	15.0	3	10.1	1.0	<20	540
JUN 21...	1000	303	5.2	18.0	1	9.1	.1	<20	<2
JUL 18...	1010	238	7.8	24.0	1	6.1	--	170	79
AUG 30...	1020	255	--	21.0	15	6.5	--	130	1600

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
MAR 31...	37	11	2.3	11	2.6	25	18	88	3
MAY 03...	51	15	3.4	13	3.3	47	19	137	9
JUN 21...	56	16	3.8	23	4.3	50	37	185	3
JUL 18...	66	13	8.1	13	2.9	14	34	151	3
AUG 30...	57	17	3.6	21	5.0	51	29	160	13

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
MAR 31...	--	--	--	--	1.8	--	.01	--	--
MAY 03...	--	--	--	--	2.5	--	.00	--	--
JUN 21...	--	--	--	--	2.1	--	.04	--	7.4
JUL 18...	1.4	.02	.12	.57	.69	2.1	.03	.01	6.0
AUG 30...	1.1	.13	3.6	.20	3.8	5.0	.21	.01	6.7

01405340 MANALAPAN BROOK AT FEDERAL ROAD NEAR MANALAPAN, NJ

LOCATION.--Lat 40°17'46", long 74°23'53", Middlesex County, Hydrologic Unit 02030105, at bridge on Federal Road, 4.1 mi (6.7 km) northeast of Applegarth, and 3.1 mi (5.0 km) southwest of Matchaponix.

DRAINAGE AREA.--20.9 mi² (54.1 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
MAR 02...	1340	129	5.3	3.0	7	11.8	1.0	<20	2
MAY 03...	1345	128	5.6	14.0	4	9.4	1.0	<20	11
JUN 21...	1305	132	5.8	20.0	2	7.9	4.0	3500	1600
JUL 18...	1340	237	7.8	23.0	1	6.0	--	260	350
AUG 30...	1400	170	--	20.0	7	7.7	--	<20	8

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
MAR 02...	34	7.8	3.5	5.3	2.6	29	10	91	11
MAY 03...	32	7.1	3.4	7.1	2.4	25	12	97	5
JUN 21...	19	2.8	3.0	9.2	2.8	19	12	67	9
JUL 18...	66	13	8.2	13	2.9	13	34	152	0
AUG 30...	31	7.1	3.2	8.0	2.9	20	12	79	16

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
MAR 02...	--	--	--	--	1.1	--	--	--	8.9
MAY 03...	--	--	--	--	1.4	--	.03	--	--
JUN 21...	--	--	--	--	1.7	--	.10	--	9.1
JUL 18...	1.4	.02	.13	.75	.88	2.3	.04	.03	6.3
AUG 30...	.63	.02	.41	.38	.79	1.4	.11	.05	6.3

01405390 MANALAPAN BROOK AT HELMETTA, NJ

LOCATION.--Lat 40°22'29", long 74°24'56", Middlesex County, Hydrologic Unit 02030105, at bridge 3.1 mi (5.0 km) northeast of Matchaponix, and 4.6 mi (7.4 km) northeast of Prospect Plains.

DRAINAGE AREA.--37.3 mi² (96.6 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
MAR 03...	0930	130	5.3	3.5	8	13.0	2.0	<20	11
MAY 03...	0935	128	5.7	14.0	4	10.8	1.0	20	33
JUN 21...	0910	125	5.8	19.0	2	8.2	3.0	140	>2400
JUL 18...	0950	164	6.9	22.0	2	7.8	--	490	130
AUG 30...	0930	132	--	19.0	2	7.0	--	790	>2400

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
MAR 03...	28	6.2	3.0	6.6	2.7	27	10	100	11
MAY 03...	32	7.1	3.5	7.0	2.4	26	12	73	8
JUN 21...	20	3.2	2.9	9.5	2.7	19	12	69	6
JUL 18...	44	8.9	5.4	8.6	2.8	16	17	99	0
AUG 30...	52	15	3.6	17	4.4	51	25	148	4

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
MAR 03...	--	--	--	--	1.4	--	.04	--	2.2
MAY 03...	--	--	--	--	1.4	--	.03	--	--
JUN 21...	--	--	--	--	1.5	--	.29	--	8.4
JUL 18...	.32	.01	.07	.55	.62	.95	.03	.01	7.0
AUG 30...	1.8	.02	1.4	.20	1.6	3.4	.01	.00	6.5

01405400 MANALAPAN BROOK AT SPOTSWOOD, NJ

LOCATION.--Lat 40°23'22", long 74°23'27", Middlesex County, Hydrologic Unit 02030105, on right bank of De Voe Lake Dam in Spotswood, 0.1 mi (0.2 km) upstream from Cedar Brook, and 0.6 mi (1.0 km) upstream from confluence with Matchaponix Brook.

DRAINAGE AREA.--40.7 mi² (105.4 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: January 1957 to current year.
CHEMICAL ANALYSES: Water years 1971 to October 1975.

REVISED DISCHARGE RECORDS.--WSP 1722: 1957-60.

GAGE.--Water-stage recorder above concrete dam. Datum of gage is NGVD (levels by Duhernal Water System). January 1957 to September 1966 at datum 17.72 ft (5.401 m) higher.

REMARKS.--Discharge records good except those for the periods when the waste gates were open, which are fair. Discharge given herein include flow over dam and through waste gates. Waste gates open Feb. 25-29, Mar. 22-29, Apr. 5-8, July 11, 12. Some regulation by Lake Manalapan, Helmetta Pond, and De Voe Lake.

AVERAGE DISCHARGE.--20 years 64.8 ft³/s (1.835 m³/s), 21.62 in/yr (549 mm/yr).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 371 ft³/s (10.5 m³/s) Feb. 26, elevation, 18.54 ft (5.651 m) waste gates open; minimum, 5.0 ft³/s (0.14 m³/s) July 29, elevation, 17.82 ft (5.432 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,650 ft³/s (46.7 m³/s) May 30, 1968, elevation 19.90 ft (6.066 m), waste gates open; no flow part or all of days in some years when gates were closed and water was below spillway.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	52	30	25	27	48	45	44	10	14	29	19
2	26	53	27	25	26	55	50	36	12	10	19	23
3	39	43	26	26	27	47	91	34	10	10	36	19
4	39	38	25	23	27	61	98	34	12	10	70	17
5	37	35	23	25	28	89	172	49	10	10	49	14
6	31	32	23	25	29	83	226	49	14	10	31	17
7	28	31	50	25	31	55	186	44	19	12	36	49
8	27	29	92	24	30	46	105	34	12	12	27	74
9	57	29	93	24	30	44	59	36	27	10	23	39
10	99	29	60	43	31	43	56	34	67	10	19	27
11	27	28	46	56	34	43	53	34	67	10	19	23
12	22	27	42	66	38	42	50	31	44	93	17	19
13	20	27	40	62	64	48	48	27	27	117	27	14
14	19	27	33	47	86	72	45	25	23	42	39	14
15	18	27	31	40	92	82	43	25	21	31	42	12
16	17	27	31	36	73	63	40	25	21	25	42	14
17	18	27	31	37	57	51	39	27	19	19	31	17
18	21	27	31	67	43	55	38	55	19	19	25	19
19	23	27	30	64	34	76	38	21	14	19	23	19
20	43	27	30	39	39	77	36	19	14	19	19	19
21	120	27	36	34	41	61	36	14	21	19	17	27
22	81	26	34	30	41	108	36	14	19	17	36	27
23	71	25	30	29	40	250	35	14	14	17	61	23
24	48	25	28	27	59	288	37	12	12	17	58	39
25	41	25	26	31	228	147	55	12	12	19	52	98
26	43	25	29	29	337	104	69	14	12	17	42	130
27	44	25	28	29	184	58	64	14	10	10	29	106
28	41	27	28	29	62	56	55	14	12	8.2	25	74
29	37	30	29	28	---	50	55	12	21	6.5	19	52
30	33	31	25	27	---	50	52	10	14	10	17	39
31	46	---	25	26	---	49	---	10	---	10	17	---
TOTAL	1248	908	1112	1098	1838	2401	2012	823	609	652.7	996	1083
MEAN	40.3	30.3	35.9	35.4	65.6	77.5	67.1	26.5	20.3	21.1	32.1	36.1
MAX	120	53	93	67	337	288	226	55	67	117	70	130
MIN	17	25	23	23	26	42	35	10	10	6.5	17	12
CFSM	1.08	.81	.96	.95	1.76	2.08	1.80	.71	.54	.57	.86	.97
IN.	1.24	.91	1.11	1.10	1.83	2.39	2.01	.82	.61	.65	.99	1.08

CAL YR 1976 TOTAL 18906.0 MEAN 51.7 MAX 450 MIN 17 CFSM 1.39 IN 18.85
WTR YR 1977 TOTAL 14780.7 MEAN 40.5 MAX 337 MIN 6.5 CFSM 1.09 IN 14.74

01405500 SOUTH RIVER AT OLD BRIDGE, NJ

LOCATION.--Lat 40°24'22", long 74°22'08", Middlesex County, Hydrologic Unit 02030105, on right abutment of Duhernal Dam, 0.6 mi (1.0 km) south of Old Bridge, 2.3 mi (3.7 km) upstream from Deep Run, and 9.1 mi (14.6 km) upstream from mouth.

DRAINAGE AREA.--94.6 mi² (245.0 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: August 1939 to current year.
CHEMICAL ANALYSES: October 1976 to August 1977.

REVISED DISCHARGE RECORDS.--WSP 1902: 1957.

GAGE.--Water-stage recorder above concrete dam. Datum of gage is NGVD.

REMARKS.--Discharge records good. The flow past this station is affected by pumpage from well fields for industrial use by Duhernal Water System. Some regulation by Duhernal Lake, capacity, 138,000,000 gal (522,300 m³), Lake Manalapan, DeVoe Lake, and several small ponds in headwater tributaries.

COOPERATION.--Water-stage recorder inspected by Duhernal Water System. Field data and samples for laboratory analyses supplied by the New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--38 years, 138 ft³/s (3.908 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,280 ft³/s (36.2 m³/s) Mar. 23, elevation, 10.77 ft (3.283 m); minimum, 17 ft³/s (0.48 m³/s) July 4-6, elevation, 9.51 ft (2.899 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,250 ft³/s (120 m³/s) Sept. 15, 1944, elevation, 11.71 ft (3.569 m), waste gates open; maximum gage height, 11.73 ft (3.575 m) Aug. 28, 1971; no flow on days when waste gates were closed and water was below spillway.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	172	56	46	46	184	110	102	22	26	32	35
2	56	130	48	46	44	148	122	84	24	21	87	38
3	78	94	44	48	47	130	273	78	23	19	102	34
4	110	84	40	46	45	166	232	72	22	18	184	29
5	78	72	40	48	44	273	502	118	21	17	114	31
6	54	60	40	46	50	218	701	130	24	18	66	60
7	44	58	114	50	55	172	351	98	42	21	72	106
8	40	56	312	46	53	136	178	78	37	23	58	136
9	72	54	211	46	52	118	166	81	58	22	40	72
10	184	52	142	98	54	106	154	87	225	20	35	50
11	81	52	106	232	56	98	142	81	178	19	44	40
12	48	50	98	220	118	94	136	69	98	253	35	34
13	40	50	87	200	197	114	114	58	60	516	48	29
14	34	46	75	160	232	232	106	52	46	166	90	26
15	31	46	66	130	218	211	98	48	40	81	110	24
16	28	46	66	90	178	166	90	46	37	52	87	24
17	26	40	69	80	136	126	84	46	32	38	60	32
18	29	44	66	190	118	142	81	75	29	32	50	37
19	31	46	63	140	102	246	81	52	26	29	40	34
20	63	46	60	90	94	190	75	44	25	26	34	38
21	338	44	81	63	110	166	75	38	42	25	29	58
22	273	44	81	58	102	312	75	32	38	26	87	50
23	166	42	66	54	98	1080	69	31	29	26	184	38
24	114	42	58	50	178	740	78	29	24	22	110	98
25	90	42	50	56	760	299	190	28	23	26	148	273
26	98	42	58	58	940	218	178	26	24	40	102	299
27	114	44	58	60	390	142	160	25	24	29	63	204
28	90	46	58	58	225	122	136	24	23	21	48	160
29	78	54	58	56	---	114	154	22	42	19	38	122
30	66	66	52	47	---	126	136	22	37	20	34	84
31	98	---	52	48	---	118	---	22	---	22	31	---
TOTAL	2706	1764	2475	2660	4742	6707	5047	1798	1375	1693	2262	2295
MEAN	87.3	58.8	79.8	85.8	169	216	168	58.0	45.8	54.6	73.0	76.5
MAX	338	172	312	232	940	1080	701	130	225	516	184	299
MIN	26	40	40	46	44	94	69	22	21	17	29	24

CAL YR 1976 TOTAL 45144 MEAN 123 MAX 1280 MIN 20
WTR YR 1977 TOTAL 35524 MEAN 97.3 MAX 1080 MIN 17

01405500 SOUTH RIVER AT OLD BRIDGE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT											
06...	0925	56	145	7.4	19.0	7	10.4	--	20	350	31
NOV											
18...	1220	44	174	7.1	7.0	3	9.7	1.0	<20	2	30
APR											
14...	1220	106	165	4.7	17.5	3	9.2	<.5	<20	33	42
MAY											
25...	1240	28	170	6.1	23.0	5	8.7	1.0	<20	13	36
JUL											
11...	1200	19	174	6.1	25.0	3	7.4	--	50	8	35
AUG											
31...	1150	31	175	--	21.0	6	8.0	--	50	13	36

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
OCT											
06...	7.6	2.8	7.9	3.3	.5	28	15	6.1	81	4	--
NOV											
18...	8.2	2.4	6.3	2.1	--	38	12	--	68	6	--
APR											
14...	11	3.5	8.4	2.8	--	37	13	--	76	9	--
MAY											
25...	9.0	3.3	11	3.0	--	33	23	--	113	0	--
JUL											
11...	9.0	3.0	12	3.0	--	33	17	--	100	6	1.3
AUG											
31...	9.4	3.1	10	3.2	--	35	17	--	103	6	1.1

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT										
06...	--	--	--	1.7	120	--	.04	--	--	1.7
NOV										
18...	--	--	--	.56	--	--	.00	--	--	--
APR										
14...	--	--	--	1.4	--	--	.02	--	7.1	--
MAY										
25...	--	--	--	2.0	--	--	.05	--	5.9	--
JUL										
11...	.01	.59	.61	1.2	--	2.5	.04	.04	6.0	--
AUG										
31...	.01	.37	.15	.52	--	1.6	.05	.01	5.7	--

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
OCT										
06...	0925	150	50	1	5	50	0	0	6	0

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)
OCT										
06...	1	0	10	1	930	210	2800	1	10	100

01405500 SOUTH RIVER AT OLD BRIDGE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT 06...	3	.5	.0	8	2	0	20	4	0	.0

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT 06...	7	.5	.9	1.1	.0	.0	.0	.0	.0	0

01405700 SOUTH RIVER BELOW DUHERNAL LAKE AT OLD BRIDGE, NJ

LOCATION.--Lat 40°25'00", long 74°21'43", Middlesex County, Hydrologic Unit 02030105, at bridge on Old Bridge-South Amboy Road in Old Bridge, 0.5 mi (0.8 km) upstream from Deep Run, and 7.4 mi (11.9 km) upstream from mouth.

DRAINAGE AREA.--95.9 mi² (248.4 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT										
06...	1110	145	6.8	17.0	5	10.1	1.0	50	240	33
NOV										
18...	1100	172	7.2	4.0	3	11.2	1.0	<20	12	29
APR										
14...	1100	167	4.7	17.0	3	8.7	<.5	<20	49	38
MAY										
25...	1130	1000	6.4	23.0	15	6.6	3.0	790	49	130
JUL										
11...	1050	500	6.3	25.0	3	6.1	--	1300	240	64

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT										
06...	8.1	3.2	8.2	3.2	--	30	15	--	88	7
NOV										
18...	7.8	2.4	6.3	2.1	--	37	12	--	77	9
APR										
14...	9.7	3.4	8.4	2.8	--	37	14	--	80	8
MAY										
25...	17	21	150	9.0	.0	65	280	4.2	643	22
JUL										
11...	11	8.9	62	4.5	--	37	180	--	293	25

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT									
06...	--	--	--	--	1.6	--	.03	--	4.1
NOV									
18...	--	--	--	--	1.4	--	.00	--	--
APR									
14...	--	--	--	--	1.4	--	.02	--	6.7
MAY									
25...	--	--	--	--	1.7	--	.05	--	5.3
JUL									
11...	1.5	.02	.25	.95	1.2	2.7	.12	.01	7.5

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY								
25...	1130	90	1	70	0	0	3	8

DATE	DISSOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY								
25...	250	6	110	.0	13	0	20	0

01406050 DEEP RUN AT OLD BRIDGE, NJ

LOCATION.--Lat 40°24'54", long 74°21'05", Middlesex County, Hydrologic Unit 02030105, at bridge 3.0 mi (4.8 km) northwest of Browntown, and 1.1 mi (1.8 km) northwest of Duhernal Lake outlet.

DRAINAGE AREA.--16.1 mi² (41.7 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
OCT 06...	1220	194	7.7	16.0	4	10.8	--	20	--
NOV 18...	0945	171	7.8	3.0	3	10.6	1.0	<20	4
FEB 02...	1220	--	4.9	1.0	3	14.3	1.0	<20	2
MAR 16...	1010	126	6.4	6.0	5	10.2	3.0	<20	<2
APR 14...	0925	167	4.2	15.5	2	9.6	<.5	<20	2
MAY 25...	1100	196	4.0	20.0	5	4.6	1.0	40	17
JUL 11...	1000	164	4.1	22.0	1	2.9	<.5	50	350
AUG 31...	1035	257	--	15.0	4	9.7	--	<20	22

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT 06...	35	8.9	3.2	5.9	3.0	48	12	103	6
NOV 18...	53	8.0	7.9	6.3	2.1	38	13	73	6
FEB 02...	32	8.0	2.9	15	2.1	42	32	172	3
MAR 16...	38	8.0	4.4	4.7	2.5	27	9.5	64	16
APR 14...	69	22	3.3	7.3	2.3	36	14	73	7
MAY 25...	29	6.4	3.1	8.6	2.5	37	17	41	0
JUL 11...	33	8.8	2.7	6.9	2.2	33	13	95	8
AUG 31...	36	10	2.6	19	2.3	34	37	119	9

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 06...	--	--	--	--	1.4	--	.01	--	3.5
NOV 18...	--	--	--	--	2.0	--	.01	--	--
FEB 02...	--	--	--	--	--	--	--	--	6.7
MAR 16...	--	--	--	--	1.8	--	.05	--	7.1
APR 14...	--	--	--	--	1.0	--	.00	--	5.7
MAY 25...	--	--	--	--	1.4	--	.03	--	6.1
JUL 11...	.27	.00	.39	.34	.73	1.0	.00	.00	8.0
AUG 31...	.19	.00	.14	.09	.23	.42	.01	.00	5.8

01406520 TENNENT BROOK NEAR OLD BRIDGE, NJ

LOCATION.--Lat 40°25'32", long 74°20'25", Middlesex County, Hydrologic Unit 02030105, at bridge on unnamed road, 400 ft (122 m) downstream from outlet of Tennent Pond, 1.5 mi (2.4 km) northeast of Old Bridge, and 4.6 mi (7.4 km) southwest of South Amboy.

DRAINAGE AREA.--9.62 mi² (24.92 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: August 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
AUG 31...	0945	178	17.0	30	8.1	<20	23	44

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
AUG 31...	13	2.9	8.8	1.9	25	23	98	14	.10

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
AUG 31...	.00	.14	.09	.23	.33	.01	.00	6.2

RESERVOIRS IN RARITAN RIVER BASIN

01396790 SPRUCE RUN RESERVOIR.--Lat 40°38'30", long 74°55'19", Hunterdon County, Hydrologic Unit 02030105, at dam on Spruce Run, 0.5 mi (0.8 km) north of Clinton, and 0.6 mi (1.0 km) upstream from mouth. DRAINAGE AREA, 41.3 mi^2 (107.0 km^2). PERIOD OF RECORD, November 1963 to current year. Nonrecording gage read daily. Datum of gage is NGVD.

Reservoir is formed by earthfill dam with concrete spillway; dam completed in October 1963 with crest of spillway 273.00 ft (83.210 m). Usable capacity, 11,000,000,000 gal (41.635 hm^3). Dead storage 300,000 gal (1,136 m^3). Reservoir used for recreation. Outflow mostly regulated by gates. Water is released to maintain minimum flow on the South Branch Raritan River. Records given herein represent usable capacity. Records furnished by New Jersey Department of Environmental Protection.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 11,100,000,000 gal (42.014 hm^3) Sept. 27, elevation, 273.22 ft (84.327 m); minimum observed, 7,200,000,000 gal (27.25 hm^3) Sept. 24 elevation, 267.93 ft (82.694 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 11,400,000,000 gal (43.149 hm^3) Dec. 11, 1975, elevation, 273.99 ft (83.512 m).

01397050 ROUND VALLEY RESERVOIR.--Lat 40°36'39", long 74°50'42", Hunterdon County, Hydrologic Unit 02030105, at main dam on Prescott Brook, 1.8 mi (2.9 km) south of Lebanon, 3.2 mi (5.1 km) upstream from mouth, and 4.5 mi (7.2 km) west of Whitehouse. DRAINAGE AREA, 5.7 mi^2 (14.8 km^2). PERIOD OF RECORD, March 1966 to current year. Nonrecording gage read daily. Datum of gage is NGVD.

Reservoir is formed by earthfill dam at main dam on Prescott Brook, and two dams on South Branch Rockaway River at Lebanon; storage began in March 1966. Capacity at spillway level, 55,000,000,000 gal (208.175 hm^3), elevation, 385.00 ft (117.348 m). Reservoir is used primarily for storage and is filled by pumping from South Branch Raritan River at Hamden Pumping Station (see following page). Outflow is controlled by operation of gate is pipe in dam. Records furnished by New Jersey Department of Environmental Protection.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 52,200,000,000 gal (197.58 hm^3) May 10, elevation, 381.65 ft (117.79 m); minimum observed, 51,300,000,000 gal (194.17 hm^3) Feb. 11, Feb. 12, elevation, 380.25 ft (117.361 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 55,400,000 gal (209.7 hm^3) June 15, 1975, elevation, 385.63 ft (117.540 m); minimum observed (after first filling), 53,600,000,000 gal (202.9 hm^3) Dec. 1, 1975, elevation, 383.31 ft (116.832 m).

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Date	Elevation* (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation* (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)
	01396790	SPRUCE RUN	RESERVOIR	01397050	ROUND VALLEY	RESERVOIR
Sept. 30	264.37	7,700	-	381.43	52,100	-
Oct. 31	265.72	8,100	+20.0	381.43	52,100	0
Nov. 30	266.51	8,400	+15.5	381.16	51,900	-10.3
Dec. 31	265.39	8,000	-20.0	380.92	51,800	-5.0
CAL YR 1976	-	-	-12.7	-	-	-8.5
Jan. 31	264.23	7,700	-15.0	380.51	51,600	-10.0
Feb. 28	266.34	8,300	+33.2	380.47	51,500	-5.5
Mar. 31	272.91	11,000	+135	381.06	51,900	+20.0
Apr. 30	273.00	11,000	0	381.52	52,100	+10.3
May 31	272.66	10,800	-10.0	381.52	52,100	0
June 30	272.95	11,000	+10.3	381.55	52,000	-5.2
July 31	269.26	9,400	-79.8	381.08	51,200	-39.9
Aug. 31	267.83	8,900	-25.0	380.98	51,800	+29.9
Sept. 30	263.53	7,400	-77.4	380.56	51,600	-10.3
WTR YR 1977	-	-	-1.3	-	-	-2.1

* Elevation at 0800 on first day of following month.

DIVERSIONS IN RARITAN RIVER BASIN

01396920 Water is diverted 4.0 mi (6.4 km) upstream from the gaging station on South Branch Raritan River at Stanton (see station 01397000), at the Hamden Pumping Station, for storage in Round Valley Reservoir. Records furnished by New Jersey Department of Environmental Protection.

01400490 Johns-Manville Products Corporation diverts water 1,500 ft (457 m) upstream from the gaging station on Raritan River at Manville (see station 01400500) for cooling purposes and returns the water to the river 0.6 mi (1.0 km) below the station. Records furnished by the Johns-Manville Products Corporation.

01400509 Elizabethtown Water Company diverts water from the Raritan and Millstone Rivers just upstream from the mouth of the Millstone River. Records given herein represent the total diversion from both rivers. Records furnished by the Elizabethtown Water Company.

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Month	HAMDEN PUMPING STATION	JOHNS-MANVILLE PRODUCTS CORPORATION	ELIZABETHTOWN WATER COMPANY
October	.06	7.2	105
November	0	6.9	104
December	0	7.1	112
CAL YR 1976	0	7.4	119
January	0	6.6	126
February	0	7.0	133
March	0	7.4	135
April	0	7.5	124
May	0	6.5	130
June	0	7.6	133
July	5.0	7.8	139
August	0	6.8	135
September	0	7.3	145
WTR YR 1977	.02	7.2	127

01407000 MATAWAN CREEK AT MATAWAN, NJ

LOCATION.--Lat 40°24'56", long 74°13'58", Monmouth County, Hydrologic Unit 02030104, at bridge on Ravine Drive in Matawan, at outflow of Lake Lefferts, 4.1 mi (6.5 km) southwest of Conaskonk Point, and 3.1 mi (5.0 km) northwest of Crawford corners.

DRAINAGE AREA.--6.11 mi² (15.82 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
OCT									
26...	0950	120	3.9	11.0	5	10.2	2.0	790	2400
FEB									
02...	0945	--	4.2	5.0	4	11.3	3.0	<20	<2
MAR									
16...	1140	125	--	8.0	5	10.1	4.0	<20	<2
MAY									
25...	1005	168	4.6	24.0	6	8.0	1.0	<20	9
JUL									
11...	1335	464	6.3	24.0	3	4.1	2.0	1100	240

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT									
26...	33	8.4	3.0	7.3	2.0	12	9.5	60	20
FEB									
02...	120	40	3.9	13	3.7	51	26	130	2
MAR									
16...	38	7.5	4.3	4.7	2.5	26	9.4	76	12
MAY									
25...	41	10	3.8	8.5	3.0	41	14	108	0
JUL									
11...	65	12	8.5	62	4.5	38	100	301	24

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT									
26...	--	--	--	--	1.4	--	.05	--	--
FEB									
02...	--	--	--	--	--	--	--	--	5.9
MAR									
16...	--	--	--	--	--	--	--	--	8.2
MAY									
25...	--	--	--	--	1.4	--	.06	--	7.3
JUL									
11...	1.5	.02	.29	.63	.92	2.4	.15	.01	8.1

01407253 WILLOW BROOK NEAR HOLMDEL, NJ

LOCATION.--Lat 40°19'47", long 74°10'26", Monmouth County, Hydrologic Unit 02030104, at bridge on Willow Brook Road, 1.2 mi (1.9 km) southeast of Holmdel, 1.3 mi (2.1 km) northeast of Vanderburg, and 1.6 mi (2.6 km) northwest of Sugar Loaf Hill.

DRAINAGE AREA.--7.52 mi² (19.48 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
OCT 26...	1140	112	6.8	10.0	3	9.3	2.0	490	--	36	10
MAR 02...	1005	206	6.4	2.0	7	12.8	2.0	130	240	69	22
MAY 23...	1020	230	7.4	17.0	10	9.4	--	170	350	87	29
JUN 22...	1000	123	6.9	18.0	6	9.3	1.0	330	1600	41	11
AUG 09...	0905	230	--	22.0	2	5.9	1.0	50	1600	82	27

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
OCT 26...	2.7	4.9	2.2	.3	13	10	12	76	19	--
MAR 02...	3.5	9.4	2.9	--	38	19	--	140	14	--
MAY 23...	3.6	8.8	2.8	.0	33	18	12	133	19	--
JUN 22...	3.4	6.2	2.1	--	11	12	--	79	7	--
AUG 09...	3.6	8.9	3.9	--	30	18	--	149	17	.52

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 26...	--	--	--	1.4	1400	--	.03	--	--	12
MAR 02...	--	--	--	1.1	--	--	--	--	7.5	--
MAY 23...	--	--	--	1.1	--	--	.11	--	6.7	--
JUN 22...	--	--	--	1.1	--	--	.02	--	4.1	--
AUG 09...	.01	.02	.57	.59	--	1.1	.11	.04	4.7	--

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
OCT 26...	1140	250	230	20	1	14	60	0	<10	10	0
MAY 23...	1020	--	--	10	2	--	30	0	--	--	0

01407253 WILLOW BROOK NEAR HOLMDEL, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)
OCT 26...	0	<10	2	10	4400	220	26000	4	80	80	150
MAY 23...	0	--	4	--	--	110	--	0	--	60	--

DATE	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT 26...	.0	.1	5	<10	0	20	50	--	8	.0
MAY 23...	.0	--	7	--	0	40	--	0	--	--

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT 26...	32	8.0	16	22	34	9.9	.0	.0	.0	0
MAY 23...	--	--	--	--	--	--	--	--	--	--

01407400 YELLOW BROOK AT COLTS NECK, NJ

LOCATION.--Lat 40°17'47", long 74°10'16", Monmouth County, Hydrologic Unit 02030104, at bridge on Creamery Road, 0.7 mi (1.1 km) north of Colts Neck, and 0.3 mi (0.5 km) upstream from Mine Brook.

DRAINAGE AREA.--9.71 mi^2 (25.15 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
OCT 26...	1320	115	7.2	9.0	10	10.4	2.0	330	>2400	35	9.1
MAR 02...	1120	115	6.5	3.0	10	12.2	2.0	130	350	37	9.8
MAY 23...	0945	130	6.9	18.0	10	8.7	--	330	540	44	12
JUN 22...	0910	126	7.0	16.0	15	10.8	.1	170	1600	41	11
AUG 09...	0940	131	--	24.0	4	5.8	<.5	20	350	41	11

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
OCT 26...	3.0	5.0	2.2	.0	13	11	12	84	14	--
MAR 02...	3.1	6.2	1.9	--	16	14	--	98	19	--
MAY 23...	3.4	6.2	1.9	.0	11	14	13	98	13	--
JUN 22...	3.3	6.2	2.1	--	12	13	--	85	3	--
AUG 09...	3.3	5.8	2.2	--	9.5	13	--	93	8	.59

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 26...	--	--	--	1.4	650	--	.04	--	3.4	6.7
MAR 02...	--	--	--	1.1	--	--	--	--	7.1	--
MAY 23...	--	--	--	1.4	--	--	.03	--	7.1	--
JUN 22...	--	--	--	.40	--	--	.02	--	4.7	--
AUG 09...	.01	.10	.48	.58	--	1.2	.04	.02	5.2	--

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
OCT 26...	1320	150	100	50	1	14	30	0	<10	<10	0
MAY 23...	0945	--	--	0	2	--	50	0	--	--	0

01407400 YELLOW BROOK AT COLTS NECK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)
OCT 26...	0	<10	2	<10	4900	150	19000	7	25	80	90
MAY 23...	2	--	6	--	--	310	--	0	--	60	--

DATE	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT 26...	.1	.0	7	<10	0	20	50	--	0	.0
MAY 23...	.0	--	9	--	0	40	--	1	--	--

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT 26...	34	13	16	52	40	10	.0	.0	.0	0
MAY 23...	--	--	--	--	--	--	--	--	--	--

01407500 SWIMMING RIVER NEAR RED BANK, NJ

LOCATION.--Lat 40°19'10", long 74°06'55", Monmouth County, Hydrologic Unit, 02030104, on left bank, 50 ft (15 m) upstream from dam at Swimming River Reservoir, 3.3 mi (5.3 km) southwest of Red Bank, and 4.8 mi (7.7 km) upstream from mouth. Water-quality samples collected at bridge on Swimming River Road, 800 ft (244 m) downstream from gaging station.

DRAINAGE AREA.--48.5 mi² (125.6 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: August 1922 to current year.
CHEMICAL ANALYSES: Water years 1976 to current year.

REVISED DISCHARGE RECORDS.--WSP 781: Drainage area. WSP 891: 1939.

GAGE.--Water-stage recorder above dam. Datum of gage is 30.00 ft (9.144 m) NGVD. Prior to Jan. 19, 1962, at site 800 ft (240 m) upstream at datum 17.67 ft (5.386 m) lower. Jan. 19 to Mar. 30, 1962, nonrecording gage, 700 ft (210 m) upstream at datum 13.87 ft (4.228 m) lower.

REMARKS.--Discharge records poor. Records given herein represent flow over spillway and flow or leakage through blowoff gates (no gate opening during the year). Diversion above station for municipal supply. Flow regulated by Swimming River Reservoir.

COOPERATION.--Water-stage recorder inspected by and record of diversion furnished by Monmouth Consolidated Water Co. Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--55 years, 78.9 ft³/s (2.234 m³/s), 22.09 in/yr (561 mm/yr), adjusted for storage and diversion.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,070 ft³/s (30.3 m³/s) Mar. 22, gage height, 5.90 ft (1.798 m); minimum daily, 0.4 ft³/s (0.011 m³/s) many days in summer months.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,910 ft³/s (252 m³/s) Oct. 27, 1943 (gage height, 8.96 ft or 2.731 m, site and datum then in use) from rating curve extended above 1,000 ft³/s (28.3 m³/s) on basis of weir formula; no flow some days in many years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	2.0	3.5	5.2	2.6	45	32	40	.40	.40	.40	.40
2	.40	2.3	3.2	4.4	2.4	36	56	29	.40	.40	.40	.40
3	.40	2.6	2.6	4.4	2.0	29	128	26	.40	.40	.40	.40
4	.40	2.9	2.6	4.8	1.3	80	74	20	.40	.40	.40	.40
5	.40	3.5	2.3	4.4	1.5	138	336	45	.40	.40	.40	.40
6	.40	3.9	2.0	4.4	1.3	80	159	50	.40	.40	.40	.40
7	.40	3.5	23	4.8	1.1	61	80	29	.40	.40	.40	.40
8	.40	3.9	70	4.8	.80	50	68	18	.40	.40	.40	.40
9	.40	3.5	30	4.4	.60	45	54	20	.40	.40	.40	.40
10	.40	3.5	23	30	.60	40	40	23	.40	.40	.40	.40
11	.40	3.5	18	115	1.2	36	40	18	.40	.40	.40	.40
12	.40	3.2	18	32	6.0	29	40	16	.40	.40	.40	.40
13	.40	3.5	15	18	15	45	32	14	.40	.40	.40	.40
14	.40	3.2	10	16	74	102	26	10	.40	.40	.40	.40
15	.40	2.9	9.2	18	61	61	23	7.8	.40	.40	.40	.40
16	.40	2.9	9.2	16	45	45	20	6.4	.40	.40	.40	.40
17	.40	2.9	9.2	14	29	29	17	4.3	.40	.40	.40	.40
18	.40	2.9	9.5	12	20	50	16	2.5	.40	.40	.40	.40
19	.40	3.2	7.8	11	17	87	15	2.2	.40	.40	.40	.40
20	.40	2.9	7.8	9.5	20	56	14	1.8	.40	.40	.40	.40
21	.40	2.9	9.6	8.6	29	50	14	1.2	.40	.40	.40	.40
22	.40	2.6	8.5	7.5	18	351	14	.40	.40	.40	.40	.40
23	.40	2.3	7.4	6.9	17	399	14	.40	.40	.40	.40	.40
24	.40	2.0	7.0	6.3	36	119	18	.40	.40	.40	.40	.40
25	.40	1.8	6.0	6.3	566	74	68	.40	.40	.40	.40	.40
26	.40	1.8	7.4	6.0	119	61	68	.40	.40	.40	.40	.40
27	.40	2.0	7.4	5.6	68	56	61	.40	.40	.40	.40	.40
28	.40	2.0	7.0	4.7	61	50	56	.40	.40	.40	.40	.40
29	.40	3.2	7.0	4.3	---	50	74	.40	.40	.40	.40	.40
30	.40	4.3	6.2	3.9	---	50	50	.40	.40	.40	.40	.40
31	1.1	---	6.0	3.2	---	45	---	.40	---	.40	.40	---
TOTAL	13.10	87.6	355.4	396.4	1216.40	2449	1707	388.20	12.00	12.40	12.40	12.00
MEAN	.42	2.92	11.5	12.8	43.4	79.0	56.9	12.5	.40	.40	.40	.40
MAX	1.1	4.3	70	115	566	399	336	50	.40	.40	.40	.40
MIN	.40	1.8	2.0	3.2	.60	29	14	.40	.40	.40	.40	.40
(†)	58.1	34.3	34.1	33.1	39.5	34.3	35.3	29.1	37.8	37.9	44.9	27.3
MEAN‡	58.5	37.2	45.6	45.9	82.9	113	92.2	41.6	38.2	38.3	45.3	27.7
CFSM‡	1.21	0.77	0.94	0.95	1.71	2.33	1.90	0.86	0.79	0.79	0.93	0.57
IN‡	1.39	0.85	1.08	1.09	1.78	2.69	2.12	0.99	0.88	0.91	1.08	0.64

CAL YR 1976 TOTAL 12936.90 MEAN 35.3 MAX 564 MIN .40 MEAN‡ 74.7 CFSM‡ 1.54 IN‡ 20.90
WTR YR 1977 TOTAL 6661.90 MEAN 18.3 MAX 566 MIN .40 MEAN‡ 55.3 CFSM‡ 1.14 IN‡ 15.50

† Diversion and change in contents in Swimming River Reservoir, in cubic feet per second.
‡ Adjusted for diversion and change in contents.

01407500 SWIMMING RIVER NEAR RED BANK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
OCT										
07...	1055	.40	314	7.4	17.0	6	7.6	1.0	230	920
MAY										
23...	1140	.40	176	6.8	19.0	10	3.4	--	80	220
AUG										
09...	1030	.40	232	--	27.0	2	3.8	<.5	20	>2400

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT									
07...	64	20	3.4	28	3.0	30	50	181	8
MAY									
23...	61	16	5.0	10	2.4	20	16	114	22
AUG									
09...	85	28	3.6	8.8	4.0	30	17	158	31

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT									
07...	--	--	--	--	2.0	--	.09	--	--
MAY									
23...	--	--	--	--	1.4	--	.04	--	8.0
AUG									
09...	.54	.00	.02	.54	.56	1.1	.09	.04	6.3

01407520 PINE BROOK AT TINTON FALLS, NJ

LOCATION.--Lat 40°18'15", long 74°06'05", Monmouth County, Hydrologic Unit 02030104, at bridge on Tinton Avenue, 150 ft (46 m) west of its intersection with Sycamone Avenue, and 0.9 mi (1.4 km) downstream from Hockhockson Brook.

DRAINAGE AREA.--12.1 mi² (31.3 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
OCT 07...	1230	107	6.8	16.0	3	9.2	--	1100	540	30	8.4
FEB 10...	0945	135	6.4	2.0	2	12.1	2.0	50	11	30	8.7
APR 20...	0930	129	6.3	12.0	3	--	1.0	<20	40	37	9.4
MAY 23...	1230	107	6.8	18.0	10	8.1	--	<20	110	46	15
AUG 09...	1110	113	--	19.0	6	8.1	<.5	230	920	34	10

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
OCT 07...	2.3	6.4	2.4	.6	17	8.7	12	76	3	--
FEB 10...	2.0	7.8	2.1	--	18	10	--	69	5	--
APR 20...	3.4	3.3	2.2	--	27	9.3	--	110	12	--
MAY 23...	2.1	5.8	2.3	.0	17	9.0	11	67	15	--
AUG 09...	2.1	6.3	2.8	--	19	8.9	--	80	15	.36

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 07...	--	--	--	.60	15	--	.03	--	3.4	3.2
FEB 10...	--	--	--	.08	--	--	--	--	1.4	--
APR 20...	--	--	--	1.1	--	--	.03	--	5.4	--
MAY 23...	--	--	--	1.3	--	--	.05	--	6.8	--
AUG 09...	.00	.01	.20	.21	--	.57	.06	.03	5.7	--

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
OCT 07...	1230	70	10	60	1	11	50	1	0	37	0
MAY 23...	1230	--	--	0	1	--	30	0	--	--	0

01407520 PINE BROOK AT TINTON FALLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)
OCT 07...	1	0	10	0	960	260	13000	7	27	20	15
MAY 23...	0	--	3	--	--	100	--	2	--	30	--

DATE	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT 07...	<.5	.0	3	0	0	10	35	--	0	.0
MAY 23...	.0	--	8	--	0	50	--	0	--	--

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT 07...	4	1.2	.4	.7	.0	.0	.0	.0	.0	0
MAY 23...	--	--	--	--	--	--	--	--	--	--

01407530 SHADOW LAKE OUTLET AT RED BANK, NJ

LOCATION.--Lat 40°21'10", long 74°05'07", Monmouth County, Hydrologic Unit 02030104, at bridge on Nut Swamp Road at River Plaza, and 150 ft (46 m) downstream from outlet of Shadow Lake.

DRAINAGE AREA.--6.83 mi² (17.69 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
OCT 07...	0930	107	7.4	18.0	9	8.7	230	>2400	30	8.2
MAY 23...	1110	211	7.5	24.0	3	6.6	<20	26	74	22

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 07...	2.2	4.8	2.4	17	9.8	73	46	1.1	.06	3.0
MAY 23...	4.6	12	2.7	33	39	138	2	1.4	.03	6.3

01407550 WAMPUM BROOK AT EATONTOWN, NJ

LOCATION.--Lat 40°18'23", long 74°03'43", Monmouth County, Hydrologic Unit 02030104, at bridge on State Route 35, 2.0 mi (3.2 km) east of Tinton Falls, and 0.9 mi (1.4 km) upstream from mouth.

DRAINAGE AREA.--1.87 mi² (4.84 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
OCT 07...	1420	316	7.4	17.0	8	8.2	1.0	130	240
FEB 10...	1125	368	6.1	3.0	9	10.7	2.0	20	350
MAR 31...	0935	154	5.5	9.0	5	8.7	1.0	<20	14
APR 20...	1045	126	6.1	14.0	3	--	1.0	<20	17
MAY 23...	1315	304	7.1	25.0	3	7.7	--	<20	2
JUN 22...	1405	294	7.6	23.0	15	8.3	--	50	170
AUG 09...	1345	282	--	24.0	1	5.1	2.0	<20	7

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT 07...	64	20	3.3	29	3.0	30	50	186	10
FEB 10...	81	27	3.4	30	3.2	36	49	203	16
MAR 31...	31	8.7	2.3	12	2.8	26	20	92	4
APR 20...	48	13	3.8	3.2	2.1	27	9.3	103	12
MAY 23...	--	--	--	--	--	--	--	192	6
JUN 22...	61	20	2.7	29	3.4	36	43	168	10
AUG 09...	64	21	2.7	25	3.4	27	45	178	9

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 07...	--	--	--	--	1.4	--	.07	--	5.0
FEB 10...	--	--	--	--	.10	--	--	--	--
MAR 31...	--	--	--	--	1.7	--	.02	--	--
APR 20...	--	--	--	--	1.4	--	.05	--	4.1
MAY 23...	--	--	--	--	1.4	--	.05	--	--
JUN 22...	--	--	--	--	.00	--	.02	--	5.5
AUG 09...	.31	.02	.06	1.1	1.2	1.5	.07	.00	5.5

01407705 SHARK RIVER NEAR NEPTUNE CITY, NJ

LOCATION.--Lat 40°11'56", long 74°04'14", Monmouth County, Hydrologic Unit 02030104, on left bank 100 ft (30 m) upstream from bridge on Remsen Mill Road, 0.3 mi (0.5 km) downstream from Robins Swamp Brook, and 1.7 mi (2.7 km) west of Neptune City.

DRAINAGE AREA.--9.96 mi² (25.80 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1966 to current year.
CHEMICAL ANALYSES: Water year 1976 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 7.05 ft (2.149 m) NGVD.

REMARKS.--Discharge records fair. Diversion above station by Monmouth Consolidated Water Co. for municipal supply and by farmers for irrigation.

COOPERATION.--Water-stage recorder inspected by Monmouth Consolidated Water Co. Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--11 years, 7.60 ft³/s (0.215 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 211 ft³/s (5.98 m³/s) July 12, gage height, 4.46 ft (1.359 m); minimum, 0.50 ft³/s (0.014 m³/s) June 19, gage height, 1.09 ft (0.332 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 580 ft³/s (16.4 m³/s) Dec. 26, 1969, gage height, 7.94 ft (2.420 m); minimum, 0.11 ft³/s (0.003 m³/s) Sept. 23, 1972.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	7.6	4.1	6.0	5.0	3.7	2.5	6.0	7.6	1.8	40	1.9
2	7.6	3.4	3.7	4.5	5.0	2.2	8.2	5.5	8.2	1.9	21	1.5
3	14	8.2	3.4	3.7	5.0	5.0	17	5.0	8.8	2.2	9.4	1.9
4	8.2	7.6	3.1	4.1	6.0	10	6.5	4.5	7.6	6.5	3.1	1.4
5	5.5	7.1	3.1	3.4	6.5	6.5	51	7.1	7.6	6.5	1.9	1.6
6	4.1	7.1	3.1	3.1	6.0	3.4	23	5.5	7.6	6.0	6.0	1.8
7	3.1	8.2	52	3.7	5.0	2.2	8.2	5.5	2.8	3.4	2.5	2.0
8	2.8	12	17	4.1	4.5	4.5	14	4.1	1.6	1.6	2.0	2.0
9	10	11	6.0	3.4	2.2	6.0	13	8.2	14	1.8	2.0	1.8
10	6.0	11	7.6	79	5.0	6.0	11	6.0	11	1.5	3.4	1.9
11	5.0	11	7.6	38	4.5	5.5	8.2	6.0	4.1	5.0	2.8	1.6
12	3.5	11	7.1	7.1	14	5.5	3.7	4.5	4.5	67	2.5	1.5
13	3.0	11	6.5	3.1	8.8	7.6	9.4	3.4	2.2	11	1.9	1.5
14	2.5	11	5.0	6.5	6.5	9.4	8.8	2.5	1.4	2.5	27	1.6
15	2.5	11	5.0	6.5	2.2	5.0	7.6	2.2	1.8	1.9	4.5	1.6
16	6.1	11	5.5	5.5	7.6	6.0	7.6	7.1	1.6	2.8	2.8	1.8
17	7.6	11	6.0	5.0	5.5	7.6	7.6	10	2.2	2.2	2.5	5.0
18	7.7	11	5.0	9.4	5.5	18	6.0	10	2.2	2.8	2.0	3.7
19	14	11	4.5	12	14	8.8	5.0	11	1.5	7.1	1.4	2.2
20	25	11	6.0	11	5.5	6.0	5.0	10	3.1	7.1	1.8	8.2
21	15	10	7.6	9.4	6.5	6.0	4.5	9.4	2.8	7.6	1.6	3.7
22	7.1	10	5.0	8.8	6.5	81	4.5	8.2	1.8	7.1	16	3.7
23	5.5	10	4.5	5.5	9.4	82	4.5	8.2	2.0	6.5	3.1	4.1
24	7.6	10	4.1	5.0	14	16	8.8	8.2	2.2	6.5	13	3.7
25	8.2	10	4.1	5.0	29	5.5	9.4	8.2	2.2	7.1	10	38
26	17	10	5.5	5.5	8.8	4.1	4.5	7.6	1.6	7.6	3.4	12
27	7.1	11	4.5	5.5	2.0	6.0	8.2	7.6	1.4	7.1	2.8	3.1
28	8.2	10	4.5	6.5	8.2	4.5	7.6	7.1	1.9	7.1	1.9	6.0
29	7.6	11	5.0	3.1	---	4.5	8.2	7.1	2.5	7.1	1.6	1.5
30	7.1	7.1	4.1	3.1	---	4.1	7.6	7.6	1.6	5.5	1.6	3.1
31	20	---	4.1	5.0	---	3.1	---	7.6	---	11	1.8	---
TOTAL	263.6	292.3	214.3	281.5	208.7	345.7	291.1	210.9	121.4	222.8	197.3	125.4
MEAN	8.50	9.74	6.91	9.08	7.45	11.2	9.70	6.80	4.05	7.19	6.36	4.18
MAX	25	12	52	79	29	82	51	11	14	67	40	38
MIN	2.5	3.4	3.1	3.1	2.0	2.2	2.5	2.2	1.4	1.5	1.4	1.4

CAL YR 1976 TOTAL 4194.1 MEAN 11.5 MAX 145 MIN 1.9
WTR YR 1977 TOTAL 2775.0 MEAN 7.60 MAX 82 MIN 1.4

01407705 SHARK RIVER NEAR NEPTUNE CITY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
NOV 08...	0945	12	123	7.8	6.0	2	11.6	--	20	350
MAR 31...	1230	3.3	151	6.5	8.0	7	10.6	<.5	50	<2
APR 20...	1205	5.2	68	5.8	--	50	--	3.0	<20	11
MAY 23...	1425	8.2	150	7.0	17.5	10	9.4	--	130	14
AUG 04...	1020	2.2	137	--	20.0	5	7.9	--	330	540

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
NOV 08...	42	9.0	4.7	4.3	3.0	--	25	9.8	--	41
MAR 31...	38	12	2.0	10	2.9	--	23	16	--	91
APR 20...	22	5.6	1.9	2.6	1.5	--	14	5.2	--	60
MAY 23...	60	20	2.5	9.4	2.3	.0	28	19	13	111
AUG 04...	37	12	1.8	8.3	1.8	--	29	13	--	108

DATE	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 08...	0	--	--	--	--	1.4	--	.04	--	--
MAR 31...	4	--	--	--	--	1.4	--	.06	--	--
APR 20...	8	--	--	--	--	1.3	--	.02	--	3.2
MAY 23...	16	--	--	--	--	1.1	--	.03	--	7.1
AUG 04...	13	.10	.00	.09	.47	.56	.66	.04	.02	5.4

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY 23...	1425	100	1	20	0	0	0	2

DATE	DISSOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY 23...	220	2	60	.0	7	0	30	3

01407760 JUMPING BROOK NEAR NEPTUNE CITY, NJ

LOCATION.--Lat 40°12'13", long 74°03'58", Monmouth County, Hydrologic Unit 02030104, on left bank 50 ft (15 m) downstream from dam on Jumping Brook Reservoir, 0.85 mi (1.37 km) upstream from mouth, and 1.4 mi (2.3 km) west of Neptune City.

DRAINAGE AREA.--6.43 mi² (16.65 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1966 to September 1975.
CHEMICAL ANALYSIS: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI (MPN)
NOV 08...	1105	E9.2	121	7.7	5.0	2	11.2	--	20	49
MAR 31...	1145	7.4	156	5.3	9.0	4	11.4	<.5	<20	6
APR 20...	1255	2.5	65	5.7	11.0	5	--	2.0	<20	<2
MAY 23...	1400	.42	165	6.7	22.0	20	8.7	--	20	170
AUG 04...	1000	7.6	126	--	21.0	4	8.1	1.0	6000	>2400

DATE	HARD-NESS (CA,MG) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	DIS-SOL-VED SUL-FIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
NOV 08...	41	8.7	4.6	4.3	3.0	--	25	9.8	--	76
MAR 31...	44	12	3.3	12	2.8	--	27	20	--	91
APR 20...	28	7.9	2.0	2.6	1.5	--	14	5.2	--	54
MAY 23...	59	18	3.4	12	2.7	.0	27	19	7.7	114
AUG 04...	26	7.1	2.0	8.6	1.7	--	28	13	--	85

DATE	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 08...	8	--	--	--	--	1.4	--	.03	--	--
MAR 31...	2	--	--	--	--	1.5	--	.02	--	--
APR 20...	2	--	--	--	--	1.1	--	.02	--	2.2
MAY 23...	26	--	--	--	--	1.4	--	.03	--	8.2
AUG 04...	14	.00	.00	.01	.30	.31	.31	.01	.00	4.9

01407760 JUMPING BROOK NEAR NEPTUNE CITY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY								
23...	1400	70	1	20	0	0	0	4

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY								
23...	200	3	80	.0	9	0	40	3

01407830 MANASQUAN RIVER NEAR GEORGIA, NJ

LOCATION.--Lat 40°12'36", long 74°16'41", Monmouth County, Hydrologic Unit 02040301, at bridge on Jacksons Mill Road, 0.5 mi (0.8 km) upstream from Debois Creek, 0.9 mi (1.4 km) southwest of intersection of Jacksons Mill Road with State Route 524, and 1.3 mi (2.1 km) southwest of Adelphia.

DRAINAGE AREA.--10.6 mi² (27.5 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1969 to current year.
CHEMICAL ANALYSES: Water years 1970-74, 1976 to current year.
SEDIMENT ANALYSES: Water years 1973-74.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 17...	1420	62	7.4	5.0	7	10.4	--	<20	<2	17
FEB 16...	1045	245	6.3	3.0	30	11.4	7.0	<20	2	56
MAR 30...	1205	113	6.4	8.0	4	10.1	2.0	<20	23	38
APR 18...	0925	228	7.1	13.0	8	10.1	--	20	220	63
MAY 23...	1330	257	6.7	20.0	20	7.1	--	5400	>2400	62
JUL 13...	1305	251	6.5	20.0	7	8.2	4.0	1800	>2400	49
AUG 04...	0920	229	--	19.0	8	6.8	2.0	>24000	>2400	61
SEP 29...	0950	211	--	17.0	10	8.3	2.0	1300	540	59

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV 17...	5.5	.8	2.0	1.2	--	13	3.9	--	41	10
FEB 16...	18	3.9	17	4.6	--	42	27	--	159	38
MAR 30...	8.4	4.1	4.1	3.0	--	26	9.1	--	76	6
APR 18...	20	3.1	13	3.4	--	30	18	--	129	12
MAY 23...	19	3.5	14	5.0	.0	28	21	22	155	69
JUL 13...	16	2.2	22	3.5	--	29	37	--	162	53
AUG 04...	19	3.3	14	5.1	--	33	18	--	147	32
SEP 29...	17	4.0	11	4.7	--	43	18	--	152	11

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 17...	--	--	--	--	1.1	--	.02	--	--
FEB 16...	--	--	--	--	5.9	--	--	--	7.1
MAR 30...	--	--	--	--	1.7	--	.02	--	--
APR 18...	--	--	--	--	1.4	--	.20	--	7.0
MAY 23...	--	--	--	--	8.4	--	.10	--	8.1
JUL 13...	--	--	--	--	1.5	--	--	--	--
AUG 04...	.25	.00	.52	.17	.69	.94	.12	.11	6.1
SEP 29...	.79	.02	1.5	.10	1.6	2.4	.38	.02	11

01407830 MANASQUAN RIVER NEAR GEORGIA, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY 23...	1330	10	2	100	0	0	0	56

DATE	DISSOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY 23...	530	2	100	.3	10	0	70	0

01407997 MARSH BOG BROOK AT SQUANKUM, NJ

LOCATION.--Lat 40°10'01", long 74°09'33", Monmouth County, Hydrologic Unit 02040301, at bridge on Squankum-Yellow Brook Road, 0.3 mi (0.5 km) west of Squankum, and 0.2 mi (0.3 km) upstream from mouth.

DRAINAGE AREA.--4.91 mi² (12.72 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1971-74, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 25...	1130	153	7.4	12.0	--	9.3	--	50	130	--
FEB 23...	1020	147	6.2	3.0	4	10.8	<.5	<20	11	42
MAR 30...	1110	122	6.4	6.0	4	10.9	1.0	<20	79	42
APR 18...	1030	121	6.4	15.0	6	9.8	--	50	6	39
MAY 23...	1230	165	7.0	17.0	8	8.2	--	270	>2400	49
AUG 04...	1130	232	--	19.0	4	9.1	2.0	940	1600	29
SEP 29...	1040	153	--	16.0	5	9.7	2.0	130	350	42

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT 25...	--	--	--	--	.0	--	--	9.7	--	--
FEB 23...	8.7	4.8	4.7	2.9	--	28	11	--	84	0
MAR 30...	9.9	4.3	4.5	3.1	--	28	12	--	96	6
APR 18...	9.5	3.8	6.5	2.6	--	22	11	--	68	3
MAY 23...	16	2.3	10	3.8	.0	20	15	12	108	6
AUG 04...	8.7	1.8	4.0	1.3	--	27	31	--	144	6
SEP 29...	9.2	4.5	4.2	3.0	--	43	18	--	155	9

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 25...	--	--	--	--	1.4	--	.03	--	--
FEB 23...	--	--	--	--	1.4	--	--	--	2.6
MAR 30...	--	--	--	--	1.7	--	.05	--	--
APR 18...	--	--	--	--	1.4	--	.07	--	5.7
MAY 23...	--	--	--	--	1.4	--	.10	--	7.9
AUG 04...	.60	.04	.46	.64	1.1	1.7	.14	.08	6.2
SEP 29...	.54	.01	.50	.12	.62	1.2	.14	.06	10

01407997 MARSH BOG BROOK AT SQUANKUM, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
OCT 25...	1130	250	0	250	0	30	0	0	0	1
MAY 23...	1230	--	--	0	1	50	0	0	0	6

DATE	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
OCT 25...	840	840	6	70	.0	4	0	60	--
MAY 23...	--	940	5	50	.0	5	0	50	1

01408000 MANASQUAN RIVER AT SQUANKUM, NJ

LOCATION.--Lat 40°09'47", long 74°09'21", Monmouth County, Hydrologic Unit 02040301, on right bank 20 ft (6.1 m) downstream from bridge on State Highway 547 (Squankum Park Road) in Squankum, and 0.4 mi (0.6 km) downstream from Marsh Bog Brook.

DRAINAGE AREA.--43.4 mi^2 (112.4 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1931 to current year. Monthly discharge only for July 1931, published in WSP 1302.
CHEMICAL ANALYSES: Water years 1963 to current year.
SEDIMENT ANALYSES: Water years 1971-74.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: July 1931 to current year.
SPECIFIC CONDUCTANCE: July 1969 to September 1974.
pH: July 1969 to September 1974.
WATER TEMPERATURES: July 1969 to September 1974.
DISSOLVED OXYGEN: July 1969 to September 1974.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 18.82 ft (5.736 m) NGVD. Prior to Aug. 13, 1940, water-stage recorder at site 80 ft (24 m) upstream at same datum.

REMARKS.--Discharge records good.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--46 years, 73.8 ft^3/s (2.090 m^3/s), 23.10 in/yr (507 mm/yr).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft^3/s (17.0 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)
Feb. 25	1245	802	22.7	6.49	1.978
Mar. 23	0500	*904	25.6	6.88	2.097

Minimum discharge, 22 ft^3/s (0.62 m^3/s) Aug. 1, gage height, 2.48 ft (0.756 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,940 ft^3/s (83.3 m^3/s) Sept. 21, 1938 (gage height, 12.45 ft or 3.795 m, from floodmark, site then in use), from rating curve extended above 900 ft^3/s (25.5 m^3/s) on basis of contracted-opening measurement of peak flow; minimum, 12.9 ft^3/s (0.37 m^3/s) Sept. 10, 1932.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	69	35	32	35	67	57	53	35	31	32	36
2	46	53	34	31	34	61	69	50	40	31	143	32
3	72	49	33	32	35	56	128	50	41	31	64	30
4	59	48	31	34	35	75	79	49	42	28	79	29
5	41	46	31	33	36	96	312	67	43	29	39	37
6	39	44	31	32	35	69	169	56	44	30	36	100
7	37	42	150	33	33	61	102	49	47	34	62	86
8	36	41	153	33	33	57	88	45	60	34	34	42
9	70	41	59	32	33	54	77	50	135	32	31	37
10	64	41	49	171	36	53	72	54	115	31	31	37
11	40	40	48	185	64	50	69	46	59	29	31	34
12	37	40	45	70	100	50	69	44	46	108	31	31
13	37	39	44	54	100	62	65	42	40	119	39	32
14	36	39	39	49	88	108	64	39	37	48	94	28
15	34	37	39	48	74	74	59	36	36	41	115	45
16	34	39	40	44	61	62	56	49	36	35	49	73
17	32	39	40	39	52	56	54	35	35	28	41	41
18	33	39	39	41	46	90	54	49	34	27	39	40
19	33	39	36	44	45	104	53	42	33	25	34	50
20	52	37	37	41	54	70	52	35	32	24	32	104
21	365	36	52	40	57	69	52	33	41	26	29	58
22	79	36	39	39	48	218	52	32	32	32	148	51
23	57	36	36	36	50	540	52	32	32	24	69	45
24	50	40	35	36	62	138	59	31	32	23	53	68
25	52	36	33	40	505	102	94	44	32	24	92	185
26	81	33	36	40	122	85	67	30	35	33	48	120
27	62	32	36	39	85	75	65	40	31	24	40	71
28	50	33	36	37	81	72	59	27	31	23	35	80
29	48	42	36	40	---	72	75	31	42	25	33	74
30	44	40	35	35	---	67	57	36	32	26	33	69
31	81	---	34	34	---	62	---	39	---	28	32	---
TOTAL	1870	1226	1421	1494	2039	2875	2380	1315	1330	1083	1668	1765
MEAN	60.3	40.9	45.8	48.2	72.8	92.7	79.3	42.4	44.3	34.9	53.8	58.8
MAX	365	69	153	185	505	540	312	67	135	119	148	185
MIN	32	32	31	31	33	50	52	27	31	23	29	28
CFSM	1.39	.94	1.06	1.11	1.68	2.14	1.83	.98	1.02	.80	1.24	1.36
IN.	1.60	1.05	1.22	1.28	1.75	2.46	2.04	1.13	1.14	.93	1.43	1.51

CAL YR 1976 TOTAL 24368 MEAN 66.6 MAX 667 MIN 23 CFSM 1.54 IN 20.89
WTR YR 1977 TOTAL 20466 MEAN 56.1 MAX 540 MIN 23 CFSM 1.29 IN 17.54

01408000 MANASQUAN RIVER AT SQUANKUM, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 25...	1040	56	--	--	--	--	--	--	--	--	--
NOV 17...	1135	39	63	6.8	6.0	7	9.4	2.0	<20	<2	22
MAR 30...	0950	67	120	6.5	8.0	4	10.2	1.0	230	33	40
APR 18...	1115	53	228	7.1	12.0	7	8.2	--	170	27	64
MAY 23...	1115	E32	264	7.1	17.0	6	6.5	--	90	350	80
JUL 13...	1050	92	253	6.6	18.0	10	8.8	3.0	1700	>2400	47
AUG 04...	1100	67	192	--	22.0	8	7.2	3.0	5400	>2400	51
SEP 29...	1115	E74	127	--	18.0	5	9.2	1.0	230	2400	51

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
OCT 25...	--	--	--	--	--	--	--	--	--	--	--
NOV 17...	6.5	1.3	2.0	1.2	--	13	4.0	--	45	13	--
MAR 30...	9.1	4.1	4.3	3.1	--	26	9.7	--	81	7	--
APR 18...	21	2.7	14	3.5	--	30	18	--	123	8	--
MAY 23...	27	3.1	17	3.9	--	28	22	15	179	10	--
JUL 13...	15	2.2	21	3.5	--	29	36	--	150	102	--
AUG 04...	17	2.1	14	3.5	--	26	20	--	143	30	.78
SEP 29...	13	4.4	6.5	3.9	.0	34	14	16	111	12	.48

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 25...	--	--	--	--	310	--	--	--	--	5.0
NOV 17...	--	--	--	1.1	--	--	.05	--	--	--
MAR 30...	--	--	--	2.0	--	--	.05	--	--	--
APR 18...	--	--	--	1.4	--	--	.13	--	7.0	--
MAY 23...	--	--	--	1.6	--	--	.15	--	7.4	--
JUL 13...	--	--	--	1.7	--	--	.10	--	--	--
AUG 04...	.05	.83	1.2	2.0	--	2.8	.35	.14	5.7	--
SEP 29...	.01	.25	.16	.41	--	.90	.17	.04	12	--

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)
OCT 25...	1040	--	--	4	--	--	<10	<10	--	--
MAY 23...	1115	0	1	--	80	0	--	--	0	0
SEP 29...	1115	170	2	--	60	0	--	--	0	0

01408000 MANASQUAN RIVER AT SQUANKUM, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)
OCT 25...	<10	--	10	--	10000	--	50	--	20	--
MAY 23...	--	5	--	310	--	7	--	70	--	.0
SEP 29...	--	6	--	3600	--	4	--	120	--	<.5

DATE	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)
OCT 25...	.1	--	<10	--	--	60	--	40	.0	66
MAY 23...	--	9	--	0	60	--	1	--	--	--
SEP 29...	--	4	--	0	20	--	1	--	--	--

DATE	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT 25...	20	18	13	11	.0	.0	.0	.0	0
MAY 23...	--	--	--	--	--	--	--	--	--
SEP 29...	--	--	--	--	--	--	--	--	--

01408033 MANASQUAN RIVER AT SQUANKUM-ALLENWOOD ROAD AT ALLENWOOD, NJ

LOCATION.--Lat 40°08'12", long 74°06'30", Ocean County, Hydrologic Unit 02040301, at bridge on Squankum-Allenwood Road, 0.4 mi (0.7 km) southwest of Allenwood, and on the boundary line between Monmouth and Ocean Counties.

DRAINAGE AREA.--65.0 mi² (168.4 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1971-72, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)
NOV												
17...	1305	63	--	5.0	7	--	2.0	<20	<2	16	5.0	.8
MAY												
16...	1120	225	7.1	16.0	7	10.5	3.0	20	280	63	21	2.6

DATE	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV											
17...	2.0	1.2	--	12	3.9	--	44	10	1.4	.04	--
MAY											
16...	15	3.5	.0	26	19	13	142	6	1.1	.14	5.4

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY								
16...	1120	90	0	30	0	0	0	4

DATE	DISSOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY								
16...	160	2	70	.0	5	0	140	0

01408070 NORTH BRANCH METEDECONK RIVER NEAR WYCKOFF MILLS, NJ

LOCATION.--Lat 40°10'52", long 74°17'17", Monmouth County, Hydrologic Unit 02040301, at bridge on Jackson Mills Road, 0.4 mi (0.7 km) southwest of Georgia, and 3.1 mi (4.9 km) southwest of Adelphia.

DRAINAGE AREA.--5.52 mi^2 (14.30 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JIU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
OCT 04...	1345	101	6.6	19.0	7	7.4	--	20	13
NOV 17...	1030	62	7.2	6.0	6	9.8	2.0	<20	<2
FEB 16...	1150	71	4.6	1.0	3	10.1	3.0	<20	22
MAR 30...	1340	108	6.4	6.0	5	11.5	<.5	<20	23
APR 18...	1410	163	6.8	12.0	6	11.1	--	80	46
MAY 17...	0920	83	6.4	16.0	9	9.0	1.0	<20	130
AUG 04...	0845	102	--	18.5	2	8.6	--	340	130
SEP 29...	0910	66	--	15.0	1	10.6	--	130	240

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT 04...	33	6.8	4.0	3.8	2.8	23	11	79	49
NOV 17...	17	5.5	.8	2.1	1.2	13	4.0	35	11
FEB 16...	17	4.8	1.1	3.7	1.0	17	6.9	70	8
MAR 30...	38	8.5	4.1	4.1	3.0	26	8.9	67	11
APR 18...	44	14	2.1	9.1	2.9	30	18	126	3
MAY 17...	31	11	.9	3.0	1.7	11	5.7	72	10
AUG 04...	49	16	2.2	20	4.5	29	6.6	84	11
SEP 29...	--	--	--	--	--	15	6.1	67	0

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 04...	--	--	--	--	1.4	--	.09	--	8.5
NOV 17...	--	--	--	--	1.1	--	.04	--	--
FEB 16...	--	--	--	--	1.4	--	--	--	3.9
MAR 30...	--	--	--	--	1.7	--	.04	--	--
APR 18...	--	--	--	--	1.4	--	.08	--	6.9
MAY 17...	--	--	--	--	1.1	--	.10	--	7.2
AUG 04...	.04	.00	.04	.43	.47	.51	.06	.01	5.5
SEP 29...	.05	.00	.02	.05	.07	.12	.09	.02	10

01408118 MUDDY FORD BROOK AT GREENVILLE, NJ

LOCATION.--Lat 40°06'34", long 74°09'43", Monmouth County, Hydrologic Unit 02040301, at bridge on Ramtown-Greenville Road, 1.3 mi (2.2 km) northwest of Lanes Mills, and 0.8 mi (1.2 km) northwest of Greenville.

DRAINAGE AREA.--11.3 mi^2 (29.3 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
OCT 04...	1130	105	6.3	17.0	7	8.2	--	80	33
NOV 17...	0920	62	7.5	4.0	6	10.1	--	<20	<2
FEB 23...	1205	147	6.1	2.0	3	11.6	2.0	<20	33
APR 18...	1235	128	6.4	14.0	6	10.1	--	130	5
MAY 17...	1410	83	6.4	18.0	8	9.4	--	50	17
SEP 29...	1240	127	--	16.0	3	8.2	--	170	1600

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT 04...	31	6.1	3.8	3.9	2.8	22	9.5	76	--
NOV 17...	17	5.5	.9	2.0	1.2	13	3.8	49	11
FEB 23...	42	8.4	5.0	4.9	2.8	28	11	85	0
APR 18...	51	9.4	6.7	6.4	2.6	22	11	71	2
MAY 17...	31	11	.8	3.0	1.8	12	5.5	80	14
SEP 29...	41	8.8	4.5	4.2	3.0	25	8.6	91	1

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 04...	--	--	--	--	1.4	--	.07	--	8.4
NOV 17...	--	--	--	--	1.1	--	.02	--	--
FEB 23...	--	--	--	--	1.4	--	--	--	2.8
APR 18...	--	--	--	--	1.4	--	.05	--	4.5
MAY 17...	--	--	--	--	1.3	--	2.6	--	6.7
SEP 29...	.48	.00	.04	.32	.36	.84	.12	.01	7.9

01408120 NORTH BRANCH METEDECONK RIVER NEAR LAKEWOOD, NJ

LOCATION.--Lat 40°05'30", long 74°09'10", Ocean County, Hydrologic Unit 02040301, on upstream right bank at bridge on State Route 549, 1.0 mi (1.6 km) upstream from confluence with South Branch Metedeconk River, and 2.3 mi (3.7 km) east of Lakewood.

DRAINAGE AREA.--34.9 mi² (90.4 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1972 to current year.
CHEMICAL ANALYSES: Water years 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3.89 ft (1.186 m) NGVD.

REMARKS.--Discharge records good.

COOPERATION.--Samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources.

AVERAGE DISCHARGE.--5 years, 64.6 ft³/s (1.829 m³/s), 25.13 in/yr (638 mm/yr).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 411 ft³/s (11.6 m³/s) July 13, gage height, 7.01 ft (2.137 m), no other peak above base of 250 ft³/s (7.08 m³/s); minimum, 14 ft³/s (0.40 m³/s) July 6, gage height, 2.35 ft (0.716 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 564 ft³/s (16.0 m³/s) Dec. 17, 1974, gage height, 7.52 ft (2.292 m); minimum, 14 ft³/s (0.40 m³/s) July 6, 1977, gage height, 2.35 ft (0.716 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	69	32	29	30	54	40	39	19	18	23	24
2	47	57	29	29	29	44	43	35	20	17	101	21
3	45	47	28	31	30	40	76	33	20	16	78	20
4	45	42	27	30	30	46	74	32	19	16	86	19
5	37	40	26	30	31	59	108	48	18	16	51	23
6	35	38	25	29	29	55	128	42	20	16	35	106
7	30	36	70	30	28	46	107	36	27	18	60	109
8	28	36	116	30	28	40	87	31	22	18	31	67
9	44	35	92	93	29	38	57	32	46	17	22	33
10	58	34	62	123	45	36	48	38	101	17	23	27
11	42	33	46	74	84	35	45	34	86	17	22	24
12	30	32	31	50	85	33	43	29	52	93	21	22
13	27	31	36	45	79	37	41	27	27	304	21	21
14	24	30	34	42	68	59	39	25	22	122	81	20
15	24	30	35	40	60	60	38	23	22	32	96	20
16	23	30	35	37	55	48	36	23	21	22	72	20
17	22	29	36	35	49	40	36	23	21	20	40	60
18	23	29	33	37	49	55	35	23	20	19	28	42
19	23	29	33	35	38	81	34	22	19	18	23	27
20	36	29	40	34	39	67	33	23	19	18	21	83
21	149	29	44	34	44	54	33	22	22	18	20	77
22	149	29	34	32	39	90	33	21	20	22	42	38
23	86	28	33	30	38	204	32	22	19	19	49	30
24	51	28	31	32	46	175	36	21	18	17	49	84
25	44	28	30	33	127	118	47	24	18	17	84	116
26	76	28	33	32	137	82	48	21	21	18	60	135
27	69	28	33	31	101	53	47	19	19	17	36	112
28	52	29	33	31	87	48	43	19	18	17	25	87
29	43	38	32	33	---	49	53	18	22	16	22	56
30	38	39	31	30	---	46	46	18	20	18	21	43
31	60	---	30	29	---	42	---	18	---	18	21	---
TOTAL	1503	1040	1230	1230	1534	1934	1566	841	818	1031	1364	1566
MEAN	48.5	34.7	39.7	39.7	54.8	62.4	52.2	27.1	27.3	33.3	44.0	52.2
MAX	149	69	116	123	137	204	128	48	101	304	101	135
MIN	22	28	25	29	28	33	32	18	18	16	20	19
CFSM	1.39	.99	1.14	1.14	1.57	1.79	1.50	.78	.78	.95	1.26	1.50
IN.	1.60	1.11	1.31	1.31	1.64	2.06	1.67	.90	.87	1.10	1.45	1.67

CAL YR 1976 TOTAL 18872 MEAN 51.6 MAX 263 MIN 19 CFSM 1.48 IN 20.12
WTR YR 1977 TOTAL 15657 MEAN 42.9 MAX 304 MIN 16 CFSM 1.23 IN 16.69

NOTE.--No gage-height record Dec. 13 to Feb. 14.

01408125 SOUTH BRANCH METEDECONK RIVER NEAR JACKSONS MILLS, NJ

LOCATION.--Lat 40°09'46", long 74°21'00", Ocean County, Hydrologic Unit 02040301, at bridge on Cedar Swamp Road, 1.4 mi (2.2 km) south of Siloam, and 3.9 mi (6.2 km) southwest of Georgia.

DRAINAGE AREA.--5.05 mi² (13.08 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
FEB 16...	1245	72	4.5	1.0	4	11.2	1.0	<20	8	16	4.6
MAY 17...	0845	60	--	12.0	4	13.1	<.5	<20	8	20	6.2

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
FEB 16...	1.0	3.1	1.1	--	17	5.6	--	52	8	1.4	6.5
MAY 17...	1.0	2.8	1.4	.0	14	5.5	8.6	55	6	--	6.8

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY 17...	0845	140	1	30	0	0	0	3

DATE	DISSOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY 17...	480	3	20	.0	0	0	40	0

01408152 SOUTH BRANCH METEDECONK RIVER NEAR LAURELTON, NJ

LOCATION.--Lat 40°04'42", long 74°09'25", Ocean County, Hydrologic Unit 02040301, at bridge on Chambers Bridge Road, 1.8 mi (2.9 km) southeast of Greenville, and 3.0 mi (4.8 km) southwest of Ramtown.

DRAINAGE AREA.--30.8 mi² (79.8 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)
OCT 25...	0915	153	7.6	10.0	--	9.9	--	230	240	--	--	--
MAY 16...	1030	93	6.6	16.0	3	10.4	1.0	40	1600	30	6.2	3.5

DATE	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 25...	--	--	.0	--	--	9.7	--	--	--	--	--
MAY 16...	7.4	2.0	.0	12	9.2	1.9	45	4	1.3	.08	5.5

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
OCT 25...	0915	250	0	250	0	30	0	0	0	1
MAY 16...	1030	--	--	150	1	0	0	0	0	4

DATE	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
OCT 25...	870	860	4	60	.1	5	0	70	--
MAY 16...	--	580	2	30	.0	2	0	70	0

01408175 KETTLE CREEK AT CEDARWOOD PARK, NJ

LOCATION.--Lat 40°02'30", long 74°08'34", Ocean County, Hydrologic Unit 02040301, at outflow of lake downstream of Irisado Lake, 300 ft (91 m) west of Moore Road, and 2.0 mi (3.2 km) southwest of Laureltown.

DRAINAGE AREA.--6.29 mi² (16.29 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)
OCT 13...	1045	124	9.2	16.0	15	7.2	2.0	20	5	15	3.4	1.6
APR 04...	1515	83	5.7	11.0	2	12.6	--	<20	79	12	2.5	1.4
MAY 16...	0930	77	7.0	18.0	5	13.9	4.0	<20	20	13	2.9	1.4

DATE	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 13...	12	3.3	.2	5.5	15	4.4	71	14	2.7	.30	7.2
APR 04...	9.3	1.5	--	4.7	15	--	52	6	1.3	.07	--
MAY 16...	8.9	1.7	.0	5.0	14	.4	58	7	1.5	.28	6.1

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
OCT 13...	1045	70	30	40	0	110	1	0	0	0
MAY 16...	0930	--	--	100	0	0	0	0	0	5

DATE	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
OCT 13...	540	380	3	10	--	3	0	0	--
MAY 16...	--	510	4	30	.0	1	0	70	0

01408260 TOMS RIVER NEAR VAN HISEVILLE, NJ

LOCATION.--Lat 40°06'35", long 74°22'26", Ocean County, Hydrologic Unit 02040301, at bridge 1.6 mi (2.6 km) west of Van Hiseville, and 0.9 mi (1.4 km) northeast of Cassville.

DRAINAGE AREA.--17.2 mi² (44.5 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)
APR												
04...	0950	62	5.1	10.5	3	15.8	--	<20	280	28	7.4	2.3
MAY												
17...	0945	68	6.1	12.0	2	10.9	1.0	330	79	19	4.9	1.7

DATE	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
APR											
04...	3.3	1.3	--	12	5.7	--	50	5	1.4	.02	--
MAY											
17...	4.4	1.3	.3	12	6.8	2.0	45	7	1.1	.05	7.2

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY								
17...	0945	130	0	9	0	0	0	7

DATE	DISSOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY								
17...	760	3	30	.0	2	0	20	0

01408310 TOMS RIVER NEAR LAKEHURST, NJ

LOCATION.--Lat 40°01'57", long 74°15'06", Ocean County, Hydrologic Unit 02040301, at bridge on State Route 70, 1.7 mi (2.7 km) east of Ridgeway, and 1.1 mi (1.8 km) from intersection of State Route 70 with State Route 571.

DRAINAGE AREA.--52.0 mi² (134.7 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)
OCT 13...	0910	99	5.4	11.0	5	10.7	20	--	14	3.2	1.4
APR 04...	1200	64	4.5	11.0	2	15.1	20	110	14	3.8	1.2

DATE	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
OCT 13...	6.9	1.6	.2	.2	11	6.9	60	5	1.3	.03
APR 04...	4.8	1.3	--	11	7.8	--	50	3	1.1	.02

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)
OCT 13...	0910	210	80	130	0	30	1	0	0

DATE	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT 13...	0	810	390	10	40	<.5	2	0	10

01408462 UNION BRANCH NEAR LAKEHURST, NJ

LOCATION.--Lat 40°00'29", long 74°17'37", Ocean County, Hydrologic Unit 02040301, at bridge on unnamed road 800 ft (244 m) upstream from Manapaqua Brook, 1.3 mi (2.1 km) east of Lakehurst, and 6.4 mi (10.3 km) south of Holmansville.

DRAINAGE AREA.--27.2 mi² (70.4 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: April 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
APR										
04...	1045	62	4.4	11.0	2	14.4	70	540	10	2.7

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
APR									
04...	.8	5.8	1.0	12	6.7	46	0	1.3	.03

01408492 RIDGEWAY BRANCH AT ROUTE 70 NEAR LAKEHURST, NJ

LOCATION.--Lat 40°01'15", long 74°16'26", Ocean County, Hydrologic Unit 02040301, at bridge on State Route 70, 0.3 mi (0.5 km) from intersection of State Route 70 with State Route 571, and 0.9 mi (1.4 km) southeast of Ridgeway.

DRAINAGE AREA.--32.1 mi² (83.1 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)
OCT												
12...	1410	48	6.2	14.0	6	8.3	--	20	21	5	.8	.7
APR												
04...	1120	69	4.1	11.0	1	13.8	--	<20	23	11	2.8	1.0
MAY												
17...	1045	54	5.4	16.0	4	7.5	1.0	20	130	15	1.6	2.6

DATE	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT											
12...	3.6	.5	.6	4.3	6.8	1.6	33	5	.40	.01	4.2
APR											
04...	3.3	1.0	--	11	4.6	--	38	3	1.4	.04	--
MAY											
17...	6.2	1.0	.0	9.1	7.5	2.3	48	5	1.4	.16	7.1

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
OCT										
12...	1410	170	90	80	0	20	1	0	0	0
MAY										
17...	1045	--	--	130	0	40	0	0	0	5

DATE	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
OCT									
12...	280	190	7	20	<.5	1	0	0	--
MAY									
17...	--	1000	4	30	.0	5	0	90	0

01408500 TOMS RIVER NEAR TOMS RIVER, NJ
(National stream-quality accounting network station)

LOCATION.--Lat 39°59'10", long 74°13'29", Ocean County, Hydrologic Unit 02040301, on left bank 1.9 mi (3.1 km) downstream from Union Branch, and 2.6 mi (4.2 km) northwest of Toms River.

DRAINAGE AREA.--124 mi² (321 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1928 to current year. Monthly discharge only for October, November 1928, published in WSP 1302.
CHEMICAL ANALYSES: Water years 1963 to current year.
SEDIMENT ANALYSES: Water years 1975 to current year.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: October 1928 to current year.
SPECIFIC CONDUCTANCE: November 1974 to current year.
WATER TEMPERATURES: November 1963 to May 1966, November 1974 to current year.

REVISED DISCHARGE RECORDS.--WSP 1702: 1938. WDR NJ-76-1: 1975(M).

GAGE.--Water-stage recorder. Datum of gage is 8.10 ft (2.469 m) NGVD.

INSTRUMENTATION.--Temperature recorder November 1963 to May 1966, water-quality monitor since November 1974.

REMARKS.--Discharge records excellent. Diversions since July 18, 1966 by Toms River Chemical Co., 800 ft (240 m) upstream from station. The effluent is returned by pipeline directly into the Atlantic Ocean, thus bypassing station. Missing continuous water-quality records are the result of malfunction of sensor or sampling mechanism.

COOPERATION.--On Apr. 4, field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--49 years, 213 ft³/s (6.032 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--
WATER DISCHARGE: Maximum, 473 ft³/s (13.4 m³/s) Sept. 27, gage height, 6.26 ft (1.908 m); minimum, 51 ft³/s (1.44 m³/s) July 6, gage height, 2.78 ft (0.847 m).
SPECIFIC CONDUCTANCE: Maximum, 445 micromhos Sept. 15; minimum, 38 micromhos Feb. 25, Sept. 17.
WATER TEMPERATURES: Maximum 27.5°C July 19; minimum, 0.0°C Dec. 13, 14.

REVISIONS.--Revised daily discharges, in cubic feet per second, for a high-water period in January of water year 1976 are given below. These figures supersede those published in the report for 1976.

Jan. 28.........430 Jan. 30.........520
29.........540 31.........440

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER DISCHARGE: Maximum, 2,000 ft³/s (56.6 m³/s) Sept. 23, 1938 (gage height, 12.50 ft or 3.810 m, from floodmark) from rating curve extended above 1,500 ft³/s (42 m³/s); minimum, 46 ft³/s (1.30 m³/s) many days in August and September 1966, gage height, 2.70 ft (0.823 m).
SPECIFIC CONDUCTANCE: Maximum, 445 micromhos Sept. 15, 1977; minimum, 38 micromhos Feb. 25, Sept. 17, 1977.
WATER TEMPERATURES: Maximum, 27.5°C July 19, 1977; minimum 0.0°C on several days during winter months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	178	115	104	120	309	182	163	76	69	76	150
2	121	182	123	104	118	238	176	159	80	68	174	148
3	119	180	118	107	117	201	188	148	80	65	243	146
4	109	182	110	111	118	189	196	145	81	64	321	137
5	103	172	103	99	122	191	241	159	79	59	354	137
6	99	160	99	104	119	192	264	165	76	57	328	165
7	97	149	127	108	116	185	293	166	90	66	254	209
8	93	144	182	106	114	173	314	166	93	74	213	219
9	104	138	194	107	111	163	278	145	103	75	184	200
10	121	132	215	185	111	156	233	141	164	70	157	160
11	123	123	212	217	118	150	200	138	188	64	149	137
12	117	124	185	216	136	148	187	133	186	92	141	126
13	106	123	169	227	154	149	201	129	148	230	137	116
14	105	119	153	228	169	163	197	127	125	290	209	110
15	95	120	140	194	183	174	171	120	113	237	266	105
16	95	120	132	177	189	180	164	105	105	166	297	103
17	98	115	131	154	179	169	154	101	96	130	338	146
18	97	115	130	146	159	170	151	103	94	114	262	180
19	88	113	128	141	154	191	144	99	90	91	210	170
20	102	113	123	140	151	201	140	102	80	78	179	198
21	191	109	134	137	154	204	137	102	82	74	155	232
22	203	113	123	136	148	234	135	99	86	71	147	254
23	222	110	118	132	146	287	136	91	78	70	161	242
24	236	106	112	129	157	343	138	89	73	68	174	261
25	208	104	109	127	224	430	145	89	73	74	198	313
26	212	103	118	128	257	394	161	87	77	70	203	402
27	206	105	119	128	337	311	177	90	72	65	207	467
28	199	92	117	127	370	242	169	85	68	62	177	438
29	193	107	117	126	---	213	163	84	74	61	151	367
30	178	108	114	128	---	199	162	82	74	68	136	290
31	170	---	108	124	---	191	---	75	---	73	148	---
TOTAL	4308	3859	4178	4397	4551	6740	5597	3687	2904	2915	6369	6328
MEAN	139	129	135	142	163	217	187	119	96.8	94.0	205	211
MAX	236	182	215	228	370	430	314	166	188	290	354	467
MIN	88	92	99	99	111	148	135	75	68	57	76	103
CFSM	1.12	1.04	1.09	1.15	1.32	1.75	1.51	.96	.78	.76	1.65	1.70
IN.	1.29	1.16	1.25	1.32	1.37	2.02	1.68	1.11	.87	.87	1.91	1.90

CAL YR 1976 TOTAL 64566 MEAN 176 MAX 800 MIN 64 CFSM 1.42 IN 19.37
WTR YR 1977 TOTAL 55833 MEAN 153 MAX 467 MIN 57 CFSM 1.23 IN 16.75

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)
OCT												
14...	1245	108	80	5.2	11.5	4	11.2	1.1	66	--	12	11
NOV												
23...	0945	111	74	5.4	4.5	2	13.5	.9	822	104	36	35
DEC												
14...	1140	154	83	3.9	3.0	4	13.7	.6	--	--	13	9
JAN												
26...	1030	128	73	5.1	2.0	2	13.1	1.1	45	27	13	11
MAR												
02...	1430	233	67	4.5	5.5	1	11.8	1.4	58	832	13	10
23...	1130	285	65	4.7	6.5	6	11.4	--	29	200	13	8
APR												
04...	1300	194	70	4.4	12.0	2	15.0	--	--	--	13	--
26...	0950	161	67	5.3	13.0	3	9.5	1.4	8280	>240	14	10
MAY												
16...	0915	109	70	6.1	15.0	3	9.2	1.3	74	900	15	9
JUN												
09...	1000	94	72	6.2	16.5	5	9.0	1.5	390	1800	18	14
JUL												
29...	0930	64	76	6.0	19.0	2	8.4	2.7	150	2600	14	9
AUG												
09...	0850	190	63	4.6	24.0	3	7.3	.8	250	1700	14	12
SEP												
13...	1215	118	68	5.0	17.0	3	8.8	.8	330	1000	11	11

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
OCT												
14...	2.6	1.4	5.5	1.4	2	0	2	20	.1	13	9.3	.1
NOV												
23...	12	1.5	5.6	1.2	2	--	2	13	--	12	26	.1
DEC												
14...	3.0	1.4	5.3	1.1	5	--	4	1010	--	13	3.6	.1
JAN												
26...	3.2	1.2	5.8	1.3	3	0	2	38	--	12	9.5	.1
MAR												
02...	2.8	1.4	4.2	1.3	3	--	2	152	--	14	6.5	.1
23...	3.4	1.0	4.8	1.3	6	--	5	192	--	12	6.4	.0
APR												
04...	3.4	1.1	5.4	1.3	--	--	--	--	--	12	7.2	--
26...	3.1	1.4	5.7	1.3	4	0	3	32	--	11	8.4	.0
MAY												
16...	3.7	1.4	6.0	1.4	7	--	6	8.9	--	10	10	.0
JUN												
09...	4.8	1.4	6.5	1.5	4	--	3	4.0	--	9.7	9.3	.0
JUL												
29...	3.4	1.4	7.7	1.5	6	--	5	9.6	--	11	10	.0
AUG												
09...	3.6	1.1	5.5	1.1	2	--	2	80	--	12	6.6	.1
SEP												
13...	2.5	1.1	5.8	1.5	0	--	0	.0	--	13	8.4	.0

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL KJEL. NITRO-GEN IN BOTTOM MAT. (MG/KG)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOT-TOM MA-TERIAL (C) (G/KG)
OCT 14...	5.9	48	2	.44	.07	.23	.30	140	.74	.09	5.8	2.3
NOV 23...	5.8	83	5	.50	.10	.14	.24	--	.74	.02	5.2	--
DEC 14...	2.7	24	5	.37	.07	.26	.33	--	.70	.02	7.0	--
JAN 26...	5.2	50	3	.49	.20	.12	.32	--	.81	.03	6.7	--
MAR 02...	4.0	44	3	.26	.05	.30	.35	--	.61	.02	7.4	--
23...	3.3	41	14	.22	.05	.63	.68	--	.90	.05	8.2	--
APR 04...	--	50	1	--	--	--	1.1	--	--	.08	--	--
26...	3.1	45	2	.39	.09	.37	.46	--	.85	.06	3.9	--
MAY 16...	3.1	46	7	.45	.11	.30	.41	--	.86	.07	6.8	--
JUN 09...	4.6	46	0	.62	.20	.55	.75	--	1.4	.09	7.9	--
JUL 29...	4.8	52	13	.64	.11	.40	.51	--	1.2	.06	5.4	--
AUG 09...	5.0	50	0	.18	.05	.53	.58	--	.76	.06	5.7	--
SEP 13...	5.4	51	4	.44	.10	.30	.40	--	.84	.06	5.4	--

DATE	TIME	TOTAL ALUM-INUM (AL) (UG/L)	SUS-PENDED ALUM-INUM (AL) (UG/L)	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	SUS-PENDED ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MA-TERIAL (UG/G)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)
OCT 14...	1245	160	60	100	2	--	--	1	30	0
NOV 23...	0945	--	--	--	1	0	1	--	--	5
MAR 02...	1430	--	--	--	0	0	0	--	--	1
MAY 16...	0915	--	--	--	1	0	1	--	--	0
AUG 09...	0850	--	--	--	--	--	0	--	--	--

DATE	SUS-PENDED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MA-TERIAL (UG/G)	TOTAL CHRO-MIUM (CR) (UG/L)	SUS-PENDED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL CHRO-MIUM IN BOTTOM MA-TERIAL (UG/G)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	SUS-PENDED COBALT (CO) (UG/L)
OCT 14...	--	--	0	--	--	--	10	0	0	--
NOV 23...	5	0	--	20	20	0	--	--	1	1
MAR 02...	1	0	--	30	23	7	--	--	0	0
MAY 16...	0	0	--	<10	<9	1	--	--	0	0
AUG 09...	--	0	--	--	--	1	--	--	--	--

DATE	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MA-TERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	SUS-PENDED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MA-TERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MA-TERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)
OCT 14...	--	0	0	--	--	1	690	300	2000	1
NOV 23...	0	--	2	1	1	--	570	320	--	57
MAR 02...	0	--	17	11	6	--	760	670	--	21
MAY 16...	0	--	2	0	2	--	1400	370	--	6
AUG 09...	0	--	--	--	8	--	--	620	--	--

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	SUS-PENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MA-TERIAL (UG/G)	TOTAL MAN-GANESE (MN) (UG/L)	SUS-PENDED MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL MANGA-NESE IN BOTTOM MA-TERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)	SUS-PENDED MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)
OCT 14...	--	--	18	60	--	--	1	<.5	--	--
NOV 23...	49	8	--	50	0	50	--	.2	.2	.0
MAR 02...	11	10	--	50	0	50	--	.0	.0	.0
MAY 16...	3	3	--	40	0	40	--	.0	.0	.0
AUG 09...	--	7	--	--	--	40	--	--	--	--

DATE	TOTAL MERCURY IN BOTTOM MA-TERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MA-TERIAL (UG/G)	TOTAL SELE-NIUM (SE) (UG/L)	SUS-PENDED SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MA-TERIAL (UG/G)
OCT 14...	.0	3	0	0	--	--	20	--	--	3
NOV 23...	--	--	--	0	0	0	20	0	20	--
MAR 02...	--	--	--	0	0	0	40	10	30	--
MAY 16...	--	--	--	0	0	0	30	20	10	--
AUG 09...	--	--	--	--	--	0	--	--	40	--

DATE	TIME	PCB IN BOTTOM MA-TERIAL (UG/KG)	ALDRIN IN BOTTOM MA-TERIAL (UG/KG)	CHLOR-DANE IN BOTTOM MA-TERIAL (UG/KG)	DDD IN BOTTOM MA-TERIAL (UG/KG)	DDE IN BOTTOM MA-TERIAL (UG/KG)	DDT IN BOTTOM MA-TERIAL (UG/KG)
OCT 14...	1245	18	.0	19	6.4	1.7	5.4

DATE	DI-ELDRIN IN BOTTOM MA-TERIAL (UG/KG)	ENDRIN IN BOTTOM MA-TERIAL (UG/KG)	HEPTA-CHLOR IN BOTTOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE IN BOT-TOM MA-TERIAL (UG/KG)	LINDANE IN BOTTOM MA-TERIAL (UG/KG)	TOX-APHENE IN BOTTOM MA-TERIAL (UG/KG)
OCT 14...	.0	.0	.0	.0	.0	0

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT						
14...	1245	108	11.5	7	2.0	83
NOV						
23...	0945	111	4.5	2	.60	100
DEC						
14...	1140	154	3.0	1	.42	100
JAN						
26...	1030	128	2.0	2	.69	100
MAR						
02...	1430	233	5.5	3	1.9	100
23...	1130	285	6.5	13	10	100
APR						
26...	0950	161	13.0	7	3.0	100
MAY						
16...	0915	109	15.0	7	2.1	100
JUN						
09...	1000	94	16.5	12	3.0	67
JUL						
29...	0930	64	19.0	30	5.2	67
AUG						
09...	0850	190	24.0	3	1.5	100
SEP						
13...	1215	118	17.0	5	1.6	100

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

PERIPHYTON

Date	Length of exposure (days)	Biomass (mg/m²)		Chlorophyll a* (mg/m²)	Chlorophyll b* (mg/m²)	Biomass chlorophyll ratio	Sampling method
		Dry weight	Ash weight				
Nov 23	33	1500	962	0.096	0.058	5600	Polyethylene strip
Jun 09	44	11000	4880	0.391	0.002	15600	

* Chlorophyll determinations in November were performed using the chromatographic-spectrophotometric technique, in June and July determinations were performed using the chromatographic-fluorometric technique.

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977--Continued

PHYTOPLANKTON ANALYSES

DATE	OCT 14,76	NOV 23,76	JAN 26,77	MAR 2,77	MAR 23,77
TIME	1245	0945	1030	1430	1130
TOTAL CELLS/ML	220	160	830	230	880
DIVERSITY: DIVISION	0.2	1.3	1.6	0.7	0.7
.CLASS	0.2	1.3	1.7	0.7	0.9
..ORDER	0.2	1.5	2.2	1.2	1.3
...FAMILY	0.9	1.6	3.5	2.0	2.4
....GENUS	1.0	1.6	3.7	2.0	2.5

ORGANISM	CELLS /ML	PERCENT	CELLS /ML	PERCENT	CELLS /ML	PERCENT	CELLS /ML	PERCENT	CELLS /ML	PERCENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...OOCYSTACEAE										
....ANKISTRODESMUS	--	-	3	2	--	-	4	2	--	-
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-	--	-
...SCENEDESMACEAE										
....CRUCIGENIA	--	-	6	4	--	-	--	-	--	-
....SCENEDESMUS	--	-	--	-	--	-	--	-	--	-
..ULOTRICHALES										
...ULOTRICHACEAE										
....ULOTHRIX	--	-	--	-	--	-	--	-	49	6
....URONEMA	--	-	--	-	--	-	--	-	25	3
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	9	4	--	-	61	7	29	13	--	-
..ZYGNEMATALES										
...DESMIDIACEAE										
....CLOSTERIUM	--	-	--	-	--	-	--	-	--	-
...ZYGNEMATACEAE										
....MOUGEOTIA	--	-	--	-	--	-	14	6	44	5
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	--	-	18	11	26	3	7	3	--	-
....MELOSIRA	--	-	--	-	10	1	--	-	44	5
..PENNALES										
...ACHNANTHACEAE										
....COCCONEIS	--	-	--	-	10	1	--	-	20	2
...CYMBELLACEAE										
....CYMBELLA	--	-	--	-	--	-	--	-	5	1
...DIATOMACEAE										
....DIATOMA	--	-	--	-	51	6	--	-	--	-
...EUNOTIACEAE										
....EUNOTIA	9	4	--	-	--	-	61#	27	490#	56
...FRAGILARIACEAE										
....ASTERIONELLA	--	-	--	-	--	-	--	-	10	1
....FRAGILARIA	180#	83	--	-	10	1	110#	48	15	2
....HANNAEA	--	-	--	-	15	2	--	-	--	-
....SYNEDRA	*	0	--	-	26	3	--	-	--	-
...GOMPHONEMATACEAE										
....GOMPHONEMA	--	-	--	-	41	5	--	-	--	-
...NAVICULACEAE										
....FRUSTULIA	9	4	--	-	--	-	--	-	*	0
....NAVICULA	--	-	9	6	51	6	4	2	--	-
....NEIDIUM	--	-	--	-	--	-	--	-	5	1
....PINNULARIA	9	4	--	-	--	-	--	-	5	1
...NITZSCHIACEAE										
....HANTZSCHIA	--	-	3	2	--	-	--	-	--	-
....NITZSCHIA	--	-	--	-	31	4	*	0	54	6
...SURIRELLACEAE										
....SURIRELLA	*	0	--	-	--	-	--	-	*	0
...TABELLARIACEAE										
....TABELLARIA	--	-	--	-	--	-	--	-	74	8
.CHRYSOPHYCEAE										
..CHRYSOMONADALES										
...MALLOMONADACEAE										
....MALLOMONAS	--	-	--	-	--	-	--	-	--	-
...OCHROMONADACEAE										
....DINOBRYON	--	-	--	-	--	-	--	-	--	-
....OCHROMONAS	--	-	--	-	5	1	--	-	25	3

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977--Continued

PHYTOPLANKTON ANALYSES--Continued

DATE	OCT 14,76		NOV 23,76		JAN 26,77		MAR 2,77		MAR 23,77	
TIME	1245		0945		1030		1430		1130	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROCCOCCALES										
...CHROCCOCCAEAE										
....ANACYSTIS	--	-	--	-	72	9	--	-	--	-
..HORMOGONALES										
...NOSTOCACEAE										
....ANABAENA	--	-	--	-	36	4	--	-	10	1
...OSCILLATORIACEAE										
....OSCILLATORIA	--	-	110#	70	150#	18	--	-	*	0
...RIVULARIACEAE										
....RAPHIDIOPSIS	--	-	--	-	150#	18	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.CRYPTOPHYCEAE										
..CRYPTOMONIDALES										
...CRYPTOCHRYSIDACEAE										
....CHROOMONAS	--	-	--	-	61	7	--	-	--	-
...CRYPTOMONODACEAE										
....CRYPTOMONAS	--	-	--	-	20	2	--	-	--	-
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....EUGLENA	--	-	--	-	--	-	--	-	5	1
....TRACHELOMONAS	--	-	9	6	--	-	*	0	--	-
PYRRHOPHYTA (FIRE ALGAE)										
.DINOPHYCEAE										
..PERIDINIALES										
...GLENODINIACEAE										
....GLENODINIUM	--	-	--	-	--	-	--	-	--	-

NOTE; # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

DATE	MAY 16,77		JUN 9,77		JUL 29,77		AUG 9,77		SEP 13,77	
TIME	0915		1000		0930		0850		1215	
TOTAL CELLS/ML	610		760		110		220		620	
DIVERSITY: DIVISION	1.1		1.5		1.6		0.6		0.5	
.CLASS	1.1		1.6		1.6		0.6		0.5	
..ORDER	1.1		1.6		2.0		0.7		0.5	
...FAMILY	2.0		2.4		3.2		0.7		0.7	
....GENUS	2.0		2.4		3.2		0.8		0.7	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...OOCYSTACEAE										
....ANKISTRODESMUS	--	-	10	1	12	11	--	-	--	-
....DICTYOSPHAERIUM	--	-	130#	17	--	-	--	-	--	-
...SCENEDESMACEAE										
....CRUCIGENIA	--	-	--	-	--	-	--	-	--	-
....SCENEDESMUS	--	-	38	5	12	11	--	-	--	-
..ULOTRICHALES										
...ULOTRICHACEAE										
....ULOTHRIX	--	-	--	-	--	-	--	-	--	-
....URONEMA	--	-	--	-	--	-	--	-	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	--	-	18#	17	--	-	--	-
..ZYGNEMATALES										
...DESMIDIACEAE										
....CLOSTERIUM	3	1	--	-	--	-	--	-	--	-
...ZYGNEMATACEAE										
....MOUGEOTIA	--	-	--	-	--	-	--	-	--	-

NOTE; # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01408500 TOMS RIVER NEAR TOMS RIVER ,NJ--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977--Continued

PHYTOPLANKTON ANALYSES--Continued

DATE	MAY 16,77		JUN 9,77		JUL 29,77		AUG 9,77		SEP 13,77	
TIME	0915		1000		0930		0850		1215	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	--	-	--	-	--	-	12	5	--	-
....MELOSIRA	--	-	--	-	--	-	12	5	--	-
..PENNALES										
...ACHNANTHACEAE										
....COCCONEIS	--	-	--	-	--	-	--	-	7	1
...CYMBELLACEAE										
....CYMBELLA	--	-	29	4	6	6	--	-	--	-
...DIATOMACEAE										
....DIATOMA	--	-	--	-	--	-	--	-	37	6
...EUNOTIACEAE										
....EUNOTIA	42	7	29	4	6	6	--	-	--	-
...FRAGILARIACEAE										
....ASTERIONELLA	--	-	--	-	--	-	--	-	--	-
....FRAGILARIA	240#	40	150#	19	--	-	--	-	--	-
....HANNAEA	--	-	--	-	--	-	--	-	--	-
....SYNEDRA	--	-	--	-	--	-	--	-	--	-
...GOMPHONEMATACEAE										
....GOMPHONEMA	--	-	14	2	12	11	--	-	--	-
...NAVICULACEAE										
....FRUSTULIA	--	-	--	-	--	-	--	-	--	-
....NAVICULA	39	6	--	-	6	6	6	3	15	2
....NEIDIUM	--	-	5	1	--	-	--	-	--	-
....PINNULARIA	--	-	--	-	--	-	--	-	--	-
...NITZSCHIACEAE										
....HANTZSCHIA	--	-	--	-	--	-	--	-	--	-
....NITZSCHIA	13	2	24	3	18#	17	--	-	7	1
...SURIRELLACEAE										
....SURIRELLA	--	-	--	-	--	-	--	-	--	-
...TABELLARIACEAE										
....TABELLARIA	23	4	--	-	--	-	--	-	--	-
.CHRYSOPHYCEAE										
..CHRYSOMONADALES										
...MALLOMONADACEAE										
....MALLOMONAS	--	-	5	1	--	-	--	-	--	-
...OCHROMONADACEAE										
....DINOBRYON	3	1	--	-	--	-	--	-	--	-
....OCHROMONAS	--	-	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....ANACYSTIS	--	-	--	-	--	-	--	-	560#	89
..HORMOGONALES										
...NOSTOCACEAE										
....ANABAENA	--	-	--	-	--	-	190#	86	--	-
...OSCILLATORIACEAE										
....OSCILLATORIA	240#	39	330#	43	--	-	--	-	--	-
...RIVULARIACEAE										
....RAPHIDIOPSIS	--	-	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.CRYPTOPHYCEAE										
..CRYPTOMONIDALES										
...CRYPTOCHRYSIDACEAE										
....CHROOMONAS	--	-	--	-	--	-	--	-	--	-
...CRYPTOMONODACEAE										
....CRYPTOMONAS	--	-	--	-	12	11	--	-	--	-
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....EUGLENA	--	-	--	-	--	-	--	-	--	-
....TRACHELOMONAS	6	1	--	-	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)										
.DINOPHYCEAE										
..PERIDINIALES										
...GLENODINIACEAE										
....GLENODINIUM	--	-	--	-	6	6	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
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01408500 TOMS RIVER NEAR TOMS RIVER ,NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	108	70	74	99	75	80	104	70	76	88	71	79
2	144	69	76	93	78	80	105	73	81	87	65	77
3	99	72	74	95	79	83	79	71	74	89	69	80
4	137	72	78	125	76	83	79	70	76	89	68	74
5	86	71	73	117	74	82	88	75	78	87	68	73
6	109	71	76	116	76	82	146	70	80	74	67	70
7	119	72	80	82	73	76	87	63	71	78	68	72
8	91	73	75	84	73	78	230	63	76	72	67	69
9	79	73	75	106	63	70	104	62	68	74	67	70
10	78	72	73	89	60	64	83	63	66	84	64	72
11	94	75	78	80	61	66	71	63	67	97	81	88
12	83	75	77	76	56	60	70	63	67	101	75	84
13	102	76	79	65	55	58	84	68	70	88	73	80
14	120	77	82	59	54	56	82	69	75	145	74	84
15	154	80	90	72	59	64	92	72	76	86	75	79
16	121	82	86	150	63	73	108	67	77	98	72	84
17	84	80	82	111	61	80	82	70	77	102	71	84
18	91	77	82	116	64	69	91	75	82	91	73	84
19	88	82	85	72	62	66	91	82	87	86	69	74
20	92	71	85	96	59	66	99	76	85	93	69	81
21	81	71	76	66	59	63	92	73	84	93	63	74
22	93	80	85	78	62	66	95	76	86	93	84	87
23	94	91	93	100	72	79	90	77	86	89	71	82
24	111	84	90	95	77	80	90	84	87	96	72	81
25	86	76	79	79	76	77	88	75	83	101	66	84
26	77	74	76	84	76	79	86	69	75	---	---	---
27	92	75	78	83	77	81	90	71	81	---	---	---
28	78	75	76	78	75	76	102	68	80	---	---	---
29	77	73	76	100	76	80	78	65	68	---	---	---
30	85	75	78	76	71	74	98	70	78	---	---	---
31	77	72	74	---	---	---	88	71	80	---	---	---
MONTH	154	69	79	150	54	73	230	62	77	145	63	79

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	200	59	68	85	71	73	69	64	67
2	---	---	---	69	63	65	81	58	68	91	66	71
3	---	---	---	71	64	67	74	53	63	78	65	71
4	---	---	---	76	46	54	81	64	70	75	67	72
5	---	---	---	69	45	60	65	53	58	99	71	77
6	---	---	---	73	67	71	70	62	66	87	67	75
7	---	---	---	73	63	69	75	66	68	89	67	73
8	---	---	---	71	64	67	71	62	67	75	67	72
9	---	---	---	118	64	70	71	66	69	126	72	81
10	---	---	---	73	65	69	69	64	67	166	73	81
11	---	---	---	70	61	68	70	66	67	166	77	89
12	---	---	---	70	55	67	77	66	70	193	79	89
13	---	---	---	67	49	55	77	66	70	108	80	84
14	---	---	---	60	50	55	84	64	70	172	79	88
15	64	60	---	70	56	66	101	63	70	143	79	85
16	68	59	64	71	63	68	121	66	74	139	81	91
17	80	60	64	77	68	72	69	65	67	106	86	91
18	65	50	57	76	57	67	74	67	70	166	90	101
19	62	52	56	83	66	68	72	65	70	145	96	101
20	64	43	51	67	59	63	91	64	69	154	100	104
21	62	46	54	70	60	65	78	66	71	121	97	100
22	112	57	65	83	48	59	93	67	73	108	97	102
23	227	64	79	66	59	62	128	72	83	155	100	111
24	93	41	58	66	55	61	148	64	71	130	103	110
25	113	38	55	74	60	65	93	63	68	140	103	112
26	63	55	58	76	65	69	114	54	66	119	105	108
27	59	46	55	73	67	70	67	53	57	139	105	110
28	92	59	63	72	66	69	71	56	60	126	99	103
29	---	---	---	115	57	73	80	55	62	105	97	100
30	---	---	---	81	69	76	146	66	74	104	96	100
31	---	---	---	77	73	75	---	---	---	114	91	98
MONTH	---	---	---	200	45	66	148	53	68	193	64	91

01408500 TOMS RIVER NEAR TOMS RIVER ,NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	98	89	92	88	73	77	88	68	81	103	49	55
2	119	87	93	79	72	76	205	64	75	111	48	56
3	346	85	101	84	76	79	85	69	75	50	48	49
4	91	78	82	84	76	80	81	72	76	51	49	50
5	88	76	79	91	81	85	96	77	82	55	43	48
6	165	76	88	90	84	86	84	78	81	126	44	54
7	102	71	78	113	81	85	78	73	75	60	45	49
8	72	65	68	82	68	74	74	66	71	102	51	58
9	69	58	63	95	69	72	76	67	70	63	54	55
10	58	52	54	73	70	72	99	42	71	54	53	53
11	54	45	49	78	70	72	118	65	70	54	53	53
12	52	43	45	83	52	69	302	67	84	125	53	65
13	49	40	43	71	55	62	68	64	65	116	53	65
14	49	40	45	157	71	79	64	60	---	186	52	65
15	49	39	42	98	69	75	---	---	---	445	52	69
16	48	40	43	76	60	70	---	---	---	73	53	57
17	72	44	49	72	68	70	---	---	---	59	38	44
18	51	44	46	228	71	88	---	---	---	46	41	42
19	57	49	53	158	73	86	---	---	---	71	42	45
20	64	50	57	302	75	101	---	---	---	66	40	45
21	96	53	61	129	75	86	---	---	---	49	44	46
22	64	54	57	85	71	76	---	---	---	107	44	54
23	62	56	59	88	67	73	---	---	---	55	45	47
24	68	57	62	78	71	75	---	---	---	46	44	45
25	68	62	65	93	72	78	---	---	---	49	47	47
26	69	58	63	137	74	83	---	---	---	53	49	51
27	75	63	70	254	75	89	---	---	---	65	53	56
28	86	68	73	124	78	88	---	---	---	62	57	58
29	70	64	66	90	78	84	55	50	---	74	59	62
30	86	64	72	86	77	79	100	52	60	70	58	66
31	---	---	---	86	76	79	237	49	64	---	---	---
MONTH	346	39	64	302	52	79	---	---	---	445	38	54
YEAR	445	38	73									

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	16.0	15.0	16.0	9.5	8.0	8.5	5.5	1.5	3.5			
2	16.0	13.5	15.0	8.0	7.0	7.5	2.5	2.0	2.5			
3	16.0	13.5	15.0	9.0	7.5	9.0	2.5	1.5	2.0			
4	17.0	15.0	16.0	10.0	8.5	9.5	5.5	1.5	4.0			
5	17.0	15.5	16.5	10.5	9.0	9.5	6.0	2.0	4.0			
6	16.5	15.5	16.0	9.5	8.5	9.0	7.5	3.5	5.5			
7	17.5	16.0	16.5	9.5	8.5	9.0	8.0	4.0	6.0			
8	18.0	16.0	17.0	9.0	7.0	8.5	5.0	2.0	3.0			
9	18.5	16.5	17.5	7.0	6.0	6.5	2.0	1.0	1.5			
10	17.0	13.5	15.5	8.0	6.0	7.0	3.0	1.0	1.5			
11	15.0	12.5	13.5	7.5	6.5	7.0	2.0	1.0	1.5			
12	13.5	11.5	13.0	7.0	5.5	6.0	3.0	1.0	1.5			
13	14.5	11.5	12.5	6.5	5.0	6.0	3.0	0.0	1.5			
14	14.0	12.0	13.0	6.0	4.5	5.5	3.0	0.0	1.0			
15	13.5	11.0	12.5	6.0	3.0	5.0	3.5	1.0	3.0			
16	14.0	12.5	13.0	6.5	5.0	6.0	5.5	2.0	3.5			
17	13.0	12.0	12.5	7.0	4.5	5.5	---	---	---			
18	12.0	10.0	11.0	6.5	5.0	5.5	---	---	---			
19	11.5	9.0	10.5	8.0	4.5	6.5	---	---	---			
20	12.5	10.5	11.0	8.0	6.5	7.5	---	---	---			
21	12.0	9.0	11.0	7.0	5.0	6.0	---	---	---			
22	11.0	9.0	10.0	6.5	5.0	6.0	---	---	---			
23	10.5	8.5	9.5	6.0	5.0	5.5	---	---	---			
24	8.5	7.5	8.0	6.0	4.5	5.5	---	---	---			
25	10.5	8.0	9.0	6.5	5.0	5.5	---	---	---			
26	11.5	10.0	11.0	8.0	6.0	6.5	---	---	---			
27	10.5	9.0	9.5	10.0	7.5	9.0	---	---	---			
28	9.0	7.0	8.0	11.0	9.5	10.0	---	---	---			
29	8.5	6.5	7.5	11.5	9.5	11.0	---	---	---			
30	8.0	7.0	7.5	9.0	3.0	5.5	---	---	---			
31	10.5	8.0	9.0	---	---	---	---	---	---			
MONTH	18.5	6.5	12.5	11.5	3.0	7.0	---	---	---			

01408500 TOMS RIVER NEAR TOMS RIVER ,NJ--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	6.5	4.5	5.5	14.5	12.0	13.0	16.5	13.0	14.5
2	---	---	---	5.5	4.0	4.5	12.0	9.5	11.0	17.5	14.5	16.0
3	---	---	---	6.0	3.5	4.5	14.0	10.5	12.5	19.0	16.0	17.5
4	---	---	---	5.5	4.0	5.0	13.0	10.5	11.5	16.5	14.5	15.5
5	---	---	---	8.5	5.5	7.0	11.5	10.0	10.5	16.5	14.5	15.0
6	---	---	---	8.5	6.5	7.5	11.0	9.0	10.0	19.0	15.0	17.5
7	---	---	---	8.5	6.5	7.0	10.0	8.0	9.0	18.5	17.5	18.0
8	---	---	---	7.5	6.0	6.5	10.0	8.5	9.5	19.0	16.0	17.5
9	---	---	---	8.5	6.5	7.0	9.5	7.5	8.5	16.5	13.5	15.0
10	---	---	---	10.0	5.5	7.5	10.0	7.5	8.5	14.0	12.5	13.5
11	---	---	---	12.0	8.0	10.0	12.0	9.0	10.5	15.0	12.5	13.5
12	---	---	---	12.0	9.5	10.5	15.0	11.0	13.0	16.5	13.0	15.0
13	---	---	---	10.0	9.5	10.0	17.0	14.0	15.5	18.0	15.0	16.5
14	---	---	---	12.5	10.0	11.5	17.5	14.0	16.0	18.0	14.5	16.5
15	---	---	---	12.5	11.0	11.5	16.5	14.0	15.5	18.0	15.0	16.5
16	---	---	---	12.5	10.0	11.0	15.0	13.5	14.5	19.0	15.0	17.0
17	---	---	---	11.5	8.5	10.0	15.5	12.5	14.0	20.0	15.5	18.5
18	---	---	---	9.5	8.0	9.0	16.0	12.0	14.0	22.0	16.5	19.5
19	---	---	---	8.5	7.0	8.0	16.5	13.5	15.0	21.0	18.5	20.0
20	---	---	---	7.5	6.5	7.0	16.5	13.5	15.5	20.5	17.5	19.0
21	---	---	---	8.5	6.0	7.0	18.0	14.0	15.5	21.5	18.0	19.5
22	---	---	---	8.5	7.5	8.0	19.0	15.0	17.0	22.0	18.5	20.0
23	4.5	3.5	---	7.0	6.5	6.5	20.0	16.5	18.5	23.0	19.5	21.0
24	5.0	4.0	4.5	6.5	5.5	6.0	18.5	15.0	16.5	22.5	20.0	21.5
25	5.0	4.0	4.5	6.0	4.0	5.0	15.5	14.0	15.0	23.0	20.0	21.5
26	5.5	3.5	4.5	6.5	4.5	5.5	14.0	13.0	13.5	23.5	19.5	21.5
27	7.0	4.0	5.0	8.0	6.0	7.0	14.0	12.5	13.5	22.5	20.5	21.5
28	7.5	6.5	7.0	9.0	8.0	8.5	14.0	12.5	13.5	22.0	18.5	20.5
29	---	---	---	13.5	8.0	11.0	15.0	12.5	13.5	21.0	18.5	19.5
30	---	---	---	16.5	12.5	14.0	15.5	12.5	14.0	19.0	17.0	18.0
31	---	---	---	16.0	14.0	15.0	---	---	---	20.5	15.5	18.0
MONTH	---	---	---	16.5	3.5	8.0	20.0	7.5	13.5	23.5	12.5	18.0

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	19.5	18.0	19.0	23.5	21.5	23.0	23.0	20.5	21.5	24.0	22.0	23.0
2	21.5	18.5	20.0	23.5	21.5	22.5	23.0	20.5	22.0	24.5	22.0	23.5
3	21.0	19.0	20.5	23.0	20.0	21.5	22.0	21.0	21.5	24.0	23.0	23.5
4	20.0	16.5	18.5	23.0	20.5	21.5	23.0	21.0	21.5	23.5	22.5	23.0
5	19.5	17.5	18.5	24.5	21.5	23.0	23.5	21.5	22.5	22.0	20.5	21.5
6	18.5	17.0	17.5	24.0	22.5	23.0	25.0	22.5	23.5	22.0	20.5	21.5
7	17.5	15.5	17.0	22.5	21.5	22.0	25.0	23.0	24.0	21.5	21.0	21.5
8	18.0	15.0	16.5	23.0	21.0	22.0	26.0	23.5	24.5	21.0	20.0	20.0
9	17.0	15.5	16.0	23.0	21.5	22.5	26.0	24.0	25.0	20.0	19.0	19.5
10	15.5	15.0	15.0	23.5	21.5	22.5	25.0	23.5	24.0	21.0	19.0	20.0
11	16.0	14.5	15.0	22.5	21.0	22.0	25.5	23.5	24.0	20.0	18.5	19.5
12	18.5	15.5	17.0	23.0	21.5	22.0	25.5	23.0	24.5	19.0	17.0	18.5
13	20.5	17.5	18.5	24.0	21.0	22.5	24.5	23.0	23.5	19.0	17.5	18.5
14	21.0	19.0	20.0	25.0	22.5	23.5	23.0	22.5	---	19.5	18.5	19.0
15	21.0	19.0	20.0	25.5	23.0	24.0	---	---	---	19.0	18.0	18.5
16	20.5	18.5	19.5	25.5	23.0	24.0	---	---	---	18.5	18.0	18.0
17	21.0	19.0	20.0	25.5	23.5	24.5	---	---	---	19.5	18.0	18.5
18	22.5	19.5	21.0	26.0	24.0	25.0	---	---	---	21.0	18.5	20.0
19	23.5	20.5	22.0	27.5	23.0	25.5	---	---	---	22.5	20.0	21.0
20	23.5	21.0	22.0	26.0	24.0	25.5	---	---	---	21.5	20.0	21.0
21	23.0	20.5	22.0	27.0	23.5	25.5	---	---	---	19.5	18.5	19.0
22	22.5	19.0	21.0	26.5	23.5	25.0	---	---	---	18.5	17.0	17.5
23	22.5	19.0	20.5	24.0	21.5	23.0	---	---	---	17.5	16.5	17.0
24	22.0	19.0	20.5	23.5	21.0	22.5	---	---	---	17.5	16.5	17.0
25	21.0	19.0	20.0	22.5	21.5	22.0	---	---	---	17.5	16.5	17.0
26	23.0	19.5	21.0	23.0	20.5	22.0	---	---	---	18.5	16.5	17.5
27	23.5	20.5	22.0	22.5	19.0	20.5	---	---	---	18.5	18.0	18.5
28	23.0	21.0	22.0	21.5	18.5	20.0	---	---	---	19.0	18.0	18.5
29	24.0	21.0	22.5	22.5	19.0	20.5	23.5	21.5	---	18.5	17.0	17.5
30	24.5	21.5	23.0	21.0	19.5	20.5	24.5	22.0	23.0	17.5	16.5	17.0
31	---	---	---	21.5	19.5	21.0	23.5	22.5	22.5	---	---	---
MONTH	24.5	14.5	19.5	27.5	18.5	22.5	---	---	---	24.5	16.5	19.5
YEAR	27.5	0.0	14.5									

01408580 MICHAELS RUN NEAR KESWICK GROVE, NJ

LOCATION.--Lat 39°57'47", long 74°19'42", Ocean County, Hydrologic Unit 02040301, at culvert pipe on unnamed road, 1.2 mi (1.9 km) northeast of Keswick Grove, 2.6 mi (4.2 km) east of Whiting, and 2.8 mi (4.5 km) upstream from mouth.

DRAINAGE AREA.--1.12 mi² (2.90 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
01...	1100	38	4.4	16.5	2	5.4	.0	2	4	0	0	0
27...	1000	36	4.0	18.0	1	4.4	.4	<2	<2	0	0	0
JUL												
28...	1440	40	4.2	17.5	1	4.5	.3	<2	<2	0	0	0
AUG												
22...	0945	42	4.3	18.0	1	5.4	.2	49	5	0	0	0
SEP												
28...	0920	46	4.1	17.0	1	5.7	.5	2	23	0	0	0

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
01...	.0	15	0	.00	.00	.00	.29	.29	.29	4.2	.00
27...	.0	21	9	.02	.00	.00	.23	.23	.25	6.2	.00
JUL											
28...	.0	20	2	.02	.00	.02	.18	.20	.22	5.9	.00
AUG											
22...	.0	22	4	.01	.00	.00	.52	.52	.53	7.3	.00
SEP											
28...	.0	22	3	.01	.00	.01	.00	.01	.02	8.5	.00

DATE	TIME	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JUN										
27...	1000	0	<10	0	0	130	3	30	8	10

01408620 DAVENPORT BRANCH NEAR DOVER FORGE, NJ

LOCATION.--Lat 39°56'29", long 74°17'49", Ocean County, Hydrologic Unit 02040301, at bridge on Pinewald Road, 2.2 mi (3.5 km) north of Dover Forge, 2.3 mi (3.7 km) east of Keswick Grove, and 3.0 mi (4.8 km) northeast of Cedar Crest.

DRAINAGE AREA.--7.41 mi^2 (19.19 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
01...	1420	32	5.2	19.5	3	6.0	1.0	<2	27	4	0	3
27...	1400	31	4.8	26.0	2	5.9	8.0	8	6	1	0	1
JUL												
28...	1300	40	4.9	20.0	2	5.6	1.3	7	22	1	0	1
AUG												
22...	1235	35	4.8	21.0	1	6.3	1.1	5	4	1	0	1
SEP												
28...	1230	48	4.4	18.0	1	6.5	.8	2	33	0	0	0

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
01...	40	38	5	.01	.00	.02	.39	.41	.42	9.2	.00
27...	25	27	4	.01	.00	.01	.39	.40	.41	6.1	.00
JUL											
28...	20	23	9	.01	.00	.05	.30	.35	.36	3.2	.00
AUG											
22...	25	26	0	.01	.00	.03	.28	.31	.32	6.1	.00
SEP											
28...	.0	22	1	.00	.00	.03	.10	.13	.13	8.3	.00

DATE	TIME	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JUN										
27...	1400	0	<10	0	2	1500	5	20	10	20

01408710 JAKES BRANCH AT SOUTH TOMS RIVER, NJ

LOCATION.--Lat 39°56'07", long 74°12'43", Ocean County, Hydrologic Unit 02040301, at bridge on Double Trouble Road in South Toms River 1.1 mi (1.8 km) west of Beachwood, and 2.6 mi (4.2 km) north of Double Trouble.

DRAINAGE AREA.--8.63 mi² (22.35 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: April 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
APR										
04...	1400	49	4.2	12.0	2	12.2	<20	<3	8	2.1

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
APR									
04...	.7	3.3	.5	5.9	5.9	32	0	.60	.01

01408800 WEBBS MILL BRANCH NEAR WHITING, NJ

LOCATION.--Lat 39°53'16", long 74°22'49", Ocean County, Hydrologic Unit 02040301, at bridge on Warren Grove-Whiting Road, 3.1 mi (5.0 km) west of Camp Columbus, 3.3 mi (5.3 km) upstream from Chamberlain Branch, and 4.5 mi (7.2 km) south of Whiting.

DRAINAGE AREA.--2.92 mi² (7.56 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1973 to current year.
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURF (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
01...	1315	21	4.9	15.0	1	7.0	.8	<2	<2	1	0	1
27...	1255	22	5.0	17.0	1	6.4	1.0	<2	<2	1	0	1
JUL												
28...	1205	26	4.9	16.0	0	7.4	5.0	5	9	1	0	1
AUG												
22...	1130	24	5.1	15.0	1	7.4	.2	23	8	2	0	2
SEP												
28...	1110	31	4.7	15.0	0	7.9	.6	2	8	1	0	1

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
01...	24	20	0	.04	.00	.00	.10	.10	.14	5.8	.00
27...	16	26	8	.05	.00	.00	.25	.25	.30	6.0	.00
JUL											
28...	20	21	0	.05	.00	.00	.00	.00	.05	7.2	.00
AUG											
22...	25	18	5	.06	.00	.01	.00	.01	.07	6.5	.00
SEP											
28...	32	18	11	.02	.00	.00	.06	.06	.08	10	.01

DATE	TIME	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JUN										
27...	1255	0	<10	0	5	80	6	10	10	20

01408830 CEDAR CREEK AT CEDAR CREST, NJ

LOCATION.--Lat 39°53'50", long 74°19'00", Ocean County, Hydrologic Unit 02040301, at bridge on Whiting-Lacey Road in Cedar Crest, 0.2 mi (0.3 km) downstream from outlet of Bamber Lake, and 3.7 mi (6.0 km) southeast of Keswick Grove.

DRAINAGE AREA.--20.1 mi² (52.1 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
01...	1355	22	5.3	20.0	2	8.8	.6	<2	7	2	0	2
27...	1325	23	5.3	25.0	1	8.0	.8	<2	7	1	0	1
JUL												
28...	1230	32	5.8	22.0	1	8.3	.8	8	13	4	0	3
AUG												
22...	1155	28	5.6	20.0	1	9.0	.8	7	33	2	0	2
SEP												
28...	1130	38	4.6	18.0	1	8.8	.8	7	8	1	0	1

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
01...	19	22	0	.00	.00	.00	.40	.40	.40	4.7	.00
27...	8.0	25	6	.00	.00	.00	.24	.24	.24	5.7	.00
JUL											
28...	10	22	0	.00	.00	.01	.08	.09	.09	5.7	.00
AUG											
22...	8.0	22	1	.01	.00	.00	.13	.13	.14	6.4	.00
SEP											
28...	40	30	9	.00	.00	.00	.02	.02	.02	8.7	.00

01408870 CEDAR CREEK AT DOUBLE TROUBLE, NJ

LOCATION.--Lat 39°53'10", long 74°12'53", Ocean County, Hydrologic Unit 02040301, at bridge on unnamed road in Double Trouble, approximately 2.3 mi (3.7 km) west of Pinewald, approximately 3.6 mi (5.8 km) south of South Toms River, and approximately 5.6 mi (9.0 km) east of Cedar Crest.

DRAINAGE AREA.--46.4 mi² (120.2 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
01...	1450	26	4.9	20.0	2	8.0	.5	9	240	1	0	1
27...	1445	26	4.8	29.0	1	7.0	.9	2	4	1	0	1
JUL												
28...	1330	39	5.2	20.0	1	8.4	.9	7	33	1	0	1
AUG												
22...	1300	33	5.0	20.0	1	8.6	.6	17	17	2	0	2
SEP												
28...	1200	46	4.3	18.0	1	8.5	1.4	2	33	0	0	0

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
01...	24	24	0	.01	.00	.00	.12	.12	.13	5.4	.00
27...	25	30	0	.00	.00	.00	.17	.17	.17	6.7	.00
JUL											
28...	10	25	0	.00	.00	.00	.23	.23	.23	7.8	.00
AUG											
22...	32	27	0	.01	.00	.00	.14	.14	.15	6.3	.02
SEP											
28...	.0	26	2	.00	.00	.01	.11	.12	.12	9.1	.00

01409000 CEDAR CREEK AT LANOKA HARBOR, NJ

LOCATION.--Lat 39°52'05", long 74°10'06", Ocean County, Hydrologic Unit 02040301, at bridge on U.S. Route 9, and at village of Lanoka Harbor.

DRAINAGE AREA.--56.0 mi² (145.0 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
OCT										
12...	1245	49	5.4	12.0	5	9.8	201	21	5	.9
JUL										
27...	1000	31	4.5	19.0	1	5.2	110	2	5	1.0
AUG										
22...	1000	35	5.2	18.5	1	8.2	70	5	--	--
SEP										
28...	1020	52	4.5	17.0	1	8.1	20	4	7	1.3

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
OCT										
12...	.7	4.1	.6	.4	4.6	6.8	1.7	30	3	--
JUL										
27...	.5	2.8	.5	--	3.7	4.8	--	26	7	.02
AUG										
22...	--	--	--	--	--	--	--	32	2	.03
SEP										
28...	.8	3.3	.7	.0	7.8	5.7	5.9	32	0	.04

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT									
12...	--	--	--	.40	--	--	.02	--	4.2
JUL									
27...	.00	.02	.06	.08	--	.10	.07	.00	6.8
AUG									
22...	.00	.01	.43	.44	--	.47	--	.00	7.1
SEP									
28...	.00	.00	.00	.00	150	.04	.01	.00	8.2

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
OCT											
12...	1245	150	90	60	0	--	30	0	--	--	0
SEP											
28...	1020	--	--	150	0	1	0	0	<10	50	0

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)
OCT											
12...	1	--	0	--	270	190	--	5	--	10	--
SEP											
28...	0	<10	2	<10	--	300	210	2	20	30	0

01409000 CEDAR CREEK AT LANOKA HARBOR, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MA- TERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MA- TERIAL (UG/G)	TOTAL SELE- NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MA- TERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MA- TERIAL (UG/KG)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)
OCT 12...	.0	--	1	--	0	0	--	--	--	--
SEP 28...	<.5	.0	1	<10	0	10	0	2	0	.0

DATE	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	DDD IN BOTTOM MA- TERIAL (UG/KG)	DDE IN BOTTOM MA- TERIAL (UG/KG)	DDT IN BOTTOM MA- TERIAL (UG/KG)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)
OCT 12...	--	--	--	--	--	--	--	--	--	--
SEP 28...	0	.0	.0	2.2	.0	.0	.0	.0	.0	0

01409040 NORTH BRANCH FORKED RIVER NEAR FORKED RIVER MOUNTAIN, NJ

LOCATION.--Lat 39°50'16", long 74°15'48", Ocean County, Hydrologic Unit 02040301, at bridge on old railroad grade, 1.5 mi (2.4 km) southeast of Forked River Mountain, 2.5 mi (4.0 km) west of Barnegat Pines, and 3.1 mi (5.0 km) north of Wells Mills.

DRAINAGE AREA.--8.62 mi² (22.32 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
01...	1350	46	4.1	15.0	2	5.0	.2	<2	13	0	0	0
27...	1235	43	4.0	17.0	1	3.6	.9	8	2	0	0	0
JUL												
28...	1215	33	4.4	15.0	1	2.9	.9	14	5	0	0	0
AUG												
22...	1110	42	4.3	16.0	1	4.1	1.3	23	49	0	0	0
SEP												
28...	1045	103	3.7	16.5	1	5.5	.9	<2	<3	0	0	0

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
01...	.0	35	0	.01	.00	.00	.46	.46	.47	6.5	.00
27...	.0	34	0	.00	.00	.00	.21	.21	.21	6.3	.00
JUL											
28...	.0	30	2	.00	.00	.00	.34	.34	.34	6.1	.00
AUG											
22...	.0	30	0	.00	.00	.00	.32	.32	.32	6.2	.00
SEP											
28...	.0	55	4	.03	.00	.00	.25	.25	.28	10	.01

01409055 NORTH BRANCH FORKED RIVER AT FORKED RIVER, NJ

LOCATION.--Lat 39°50'10", long 74°11'48", Ocean County, Hydrologic Unit 02040301, at bridge on U.S. Route 9 in Forked River, 500 ft (152 m) downstream from outlet of Lower Lake, and approximately 1.7 mi (2.7 km) southwest of Murray Grove.

DRAINAGE AREA.--15.4 mi^2 (39.9 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
JUN											
01...	1050	1900	5.8	21.0	5	7.6	.5	460	540	--	--
27...	1000	5530	6.6	24.0	1	7.4	1.4	330	540	--	--
JUL											
27...	1100	6280	6.7	22.0	2	7.2	1.3	220	130	--	--
AUG											
22...	1040	3600	6.5	22.0	1	6.5	.5	20	23	--	--
SEP											
28...	1145	6040	6.4	19.5	1	6.8	1.0	50	4	670	37

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
JUN										
01...	--	--	--	7	--	--	--	1010	5	.02
27...	--	--	--	--	--	--	--	3200	6	.05
JUL										
27...	--	--	--	--	--	--	--	3490	6	.01
AUG										
22...	--	--	--	--	--	--	--	2050	6	.01
SEP										
28...	140	1000	38	--	.0	250	2.9	3170	0	.04

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN										
01...	.00	.04	.41	.45	--	.47	6.1	--	--	.00
27...	.01	.06	.42	.48	--	.54	4.7	--	--	.00
JUL										
27...	.01	.05	.30	.35	--	.37	7.9	--	--	.00
AUG										
22...	.01	.01	.20	.21	--	.23	7.8	--	--	.00
SEP										
28...	.00	.09	.03	.12	690	.16	7.9	4.1	.03	.00

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)
SEP										
28...	1145	150	1	1	400	0	<10	30	0	2

01409055 NORTH BRANCH FORKED RIVER AT FORKED RIVER, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)
SEP 28...	<10	2	<10	320	410	1	100	30	0	<.5

DATE	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)
SEP 28...	.0	3	<10	0	30	10	0	0	.0	0

DATE	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
SEP 28...	3.7	1.9	3.4	.0	.0	.0	.0	.0	0

01409095 OYSTER CREEK NEAR BROOKVILLE, NJ

LOCATION.--Lat 39°47'54", long 74°15'02", Ocean County, Hydrologic Unit 02040301, on left bank 100 ft (30 m) upstream from bridge on State Highway 532, 1.5 mi (2.4 km) downstream from reservoir at Wells Mill, and 3.2 mi (5.1 km) northeast of Brookville.

DRAINAGE AREA.--7.43 mi^2 (19.24 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1965 to current year.
CHEMICAL ANALYSES: Water years 1973 to current year.
SEDIMENT ANALYSES: November 1975.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: July 1965 to current year.
SPECIFIC CONDUCTANCE: February 1975 to April 1977 (discontinued).
pH: February 1975 to April 1977 (discontinued).
WATER TEMPERATURES: February 1975 to October 1976.
DISSOLVED OXYGEN: February 1975 to October 1976.

GAGE.--Water-stage recorder and water-quality monitor. Datum of gage is 24.74 ft (7.541 m) NGVD.

INSTRUMENTATION.--Water quality monitor from February 1975 to April 1977.

REMARKS.--Discharge records fair. Flow probably contains considerable ground-water inflow from other surface drainage basins. Some minor regulation possible from small reservoirs and cranberry bogs upstream. Missing continuous water-quality records are the result of malfunction of sensor or sampling mechanism.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--12 years, 27.8 ft^3/s (0.787 m^3/s), 50.81 in/yr (1,291 mm/yr).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 76 ft^3/s (2.15 m^3/s) Jan. 11, gage height, 5.10 ft (1.554 m), no other peak above base of 75 ft^3/s (2.12 m^3/s); minimum daily, 15 ft^3/s (0.42 m^3/s) July 27-31.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 232 ft^3/s (6.57 m^3/s) Dec. 26, 1969, gage height, 6.18 ft (1.884 m); minimum, 12 ft^3/s (0.34 m^3/s) Aug. 6, 7, 1965, gage height, 3.46 ft (1.055 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	30	21	22	22	27	23	21	19	18	20	23
2	27	26	21	22	22	26	30	21	19	18	26	21
3	24	25	20	22	22	24	29	21	19	18	36	20
4	22	24	20	22	22	25	30	21	18	18	30	19
5	21	24	20	21	23	28	47	24	18	18	20	35
6	21	23	20	21	22	26	38	23	19	18	33	52
7	20	22	31	20	22	26	30	22	21	19	43	52
8	21	21	40	20	22	24	28	21	19	19	42	35
9	36	21	28	20	22	24	26	21	28	18	25	26
10	31	21	24	50	22	23	26	22	32	18	22	22
11	25	21	23	60	23	22	26	21	25	18	22	26
12	22	21	22	38	24	22	26	21	21	18	21	24
13	22	21	22	28	25	23	25	21	19	18	25	23
14	21	21	20	26	25	26	24	20	19	20	35	23
15	20	20	20	26	24	24	23	20	25	26	44	22
16	20	21	21	26	24	23	23	20	23	38	37	22
17	21	21	21	25	23	22	22	20	20	19	32	24
18	22	30	20	24	23	27	22	20	19	18	27	25
19	20	22	20	24	23	37	21	20	19	17	22	24
20	27	21	21	25	24	28	21	20	19	16	20	22
21	49	20	25	24	24	27	22	20	19	20	25	22
22	31	20	21	24	23	30	22	20	18	18	36	21
23	30	20	21	24	23	59	21	19	18	17	44	21
24	27	20	20	24	26	38	22	19	18	16	43	22
25	28	20	20	24	50	26	22	19	18	16	40	24
26	43	20	21	24	38	25	22	19	18	16	37	27
27	38	21	22	24	29	25	22	19	18	15	35	30
28	29	21	22	24	30	25	22	19	18	15	25	34
29	26	26	22	23	---	25	24	19	18	15	22	43
30	24	24	22	23	---	24	22	19	18	15	20	25
31	30	---	22	22	---	23	---	19	---	15	21	---
TOTAL	830	668	693	802	702	834	761	631	602	568	930	809
MEAN	26.8	22.3	22.4	25.9	25.1	26.9	25.4	20.4	20.1	18.3	30.0	27.0
MAX	49	30	40	60	50	59	47	24	32	38	44	52
MIN	20	20	20	20	22	22	21	19	18	15	20	19
CFSM	3.61	3.00	3.02	3.49	3.38	3.62	3.42	2.75	2.71	2.46	4.04	3.63
IN.	4.16	3.34	3.47	4.01	3.51	4.18	3.81	3.16	3.01	2.84	4.66	4.05

CAL YR 1976 TOTAL 8746 MEAN 23.9 MAX 88 MIN 13 CFSM 3.22 IN 43.78
WTR YR 1977 TOTAL 8830 MEAN 24.2 MAX 60 MIN 15 CFSM 3.26 IN 44.20

01409095 OYSTER CREEK NEAR BROOKVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)
OCT 01...	1330	32	--	--	--	--	--	--	--	--	--	--
NOV 23...	1215	21	42	4.5	6.5	1	11.0	.4	40	<2	40	<2
JAN 27...	1300	24	42	4.4	5.5	1	12.0	--	20	23	31	<2
APR 22...	0845	23	36	4.8	13.5	1	8.1	.1	83	--	8250	--
MAY 23...	1040	20	36	4.8	16.0	1	7.8	.1	83	2	230	23
JUN 20...	1040	20	36	4.5	17.5	1	7.5	1.0	810	7	360	<2
JUL 22...	0950	E18	38	4.7	18.5	1	8.0	.8	--	<20	--	<20
AUG 15...	1215	E44	41	4.4	17.5	1	7.9	.7	--	240	--	8

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT 01...	--	--	--	--	--	--	--	--	--	--	2.1	--
NOV 23...	4	4	.7	.6	3.1	2.0	0	0	0	.0	4.6	5.6
JAN 27...	4	4	.7	.5	3.2	.6	0	0	0	.0	5.0	5.3
APR 22...	7	6	.7	1.3	1.9	.4	1	0	1	25	4.0	5.4
MAY 23...	7	6	.8	1.1	3.1	.5	1	0	1	25	4.0	5.6
JUN 20...	4	4	.9	.5	3.2	.5	0	0	0	.0	3.2	5.4
JUL 22...	4	0	1.0	.4	3.0	.5	6	0	5	195	3.4	5.4
AUG 15...	4	4	.6	.5	3.3	.5	0	0	0	.0	4.4	5.6

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 01...	--	--	--	--	--	--	--	--	--	--	--
NOV 23...	10	0	--	--	.00	.00	.00	.02	.00	--	1.0
JAN 27...	28	1	--	--	--	--	1.1	--	.02	--	2.6
APR 22...	22	4	--	--	--	--	1.0	--	.01	--	1.4
MAY 23...	22	9	--	--	--	--	1.1	--	.00	--	6.2
JUN 20...	30	0	--	--	--	--	.80	--	.00	--	8.1
JUL 22...	19	5	.01	.00	.00	.20	.20	.21	.01	.01	4.7
AUG 15...	28	7	.01	.00	.01	.10	.11	.12	.01	.01	4.3

01409095 OYSTER CREEK NEAR BROOKVILLE, NJ--Continued

PH (UNITS), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	5.1	4.1	4.5	4.8	4.3	4.4	4.2	4.1	4.2	4.2	4.2	4.2
2	4.3	4.2	4.2	4.5	4.0	---	4.2	4.1	4.2	4.2	4.2	4.2
3	4.4	3.8	4.2	4.3	4.0	---	4.2	4.2	4.2	4.2	4.1	4.1
4	4.4	3.9	4.2	---	---	---	4.2	4.2	4.2	4.2	4.2	4.2
5	4.0	3.2	3.5	4.4	3.9	---	4.2	4.1	4.1	4.3	4.2	4.2
6	3.2	2.8	3.0	4.4	4.1	---	4.1	3.9	4.0	4.3	4.2	4.2
7	3.2	2.7	3.0	4.3	4.1	---	6.4	3.8	4.7	4.3	4.2	4.2
8	3.3	2.9	3.1	4.5	4.2	4.3	3.9	3.7	3.8	4.3	4.2	4.3
9	3.3	2.9	3.1	4.5	4.2	4.3	3.9	3.8	3.9	4.3	4.1	4.2
10	4.2	3.3	3.8	4.6	4.2	4.3	4.0	3.9	3.9	4.8	4.1	---
11	4.2	3.7	3.9	4.5	4.3	4.4	4.0	4.0	4.0	---	---	---
12	4.2	3.7	4.1	4.4	4.3	4.4	4.1	4.0	4.0	4.2	4.2	---
13	4.0	3.3	3.8	4.4	4.2	4.3	4.1	4.0	4.1	4.4	4.2	4.3
14	4.3	3.7	3.9	4.4	4.2	4.3	4.1	4.0	4.0	4.4	4.3	4.3
15	4.3	3.9	4.2	4.5	4.4	4.5	4.1	4.0	4.0	4.4	4.3	4.3
16	4.2	4.0	4.0	4.6	4.4	4.5	4.1	4.1	4.1	4.5	4.4	4.5
17	4.2	3.8	4.1	4.6	4.4	4.5	4.1	4.0	4.1	4.5	4.5	4.5
18	4.2	3.8	3.9	4.6	4.3	4.4	4.1	4.1	4.1	4.5	4.5	4.5
19	4.2	4.0	4.1	4.5	4.2	4.4	4.2	4.1	4.1	4.6	4.5	4.5
20	4.5	3.7	3.8	4.3	4.3	4.3	4.9	4.1	4.3	4.9	4.6	4.7
21	4.6	3.6	4.1	4.7	4.3	4.4	4.2	4.0	4.1	4.8	4.6	4.7
22	4.4	4.0	4.2	4.5	4.3	4.4	4.2	4.0	4.1	4.8	4.6	4.7
23	4.5	4.1	4.3	4.4	4.3	4.4	4.2	4.1	4.1	4.9	4.6	4.7
24	5.5	4.3	4.9	4.4	4.3	4.3	4.2	4.1	4.1	5.6	4.7	5.1
25	5.6	4.7	5.1	4.3	4.3	4.3	4.2	4.1	4.2	5.0	4.7	4.7
26	5.9	4.0	4.8	4.3	4.1	4.3	4.4	4.1	4.2	4.9	4.7	4.8
27	4.7	4.1	4.3	4.8	4.3	4.6	4.1	4.0	4.0	4.7	4.7	4.7
28	4.9	4.2	4.3	4.6	4.3	4.4	4.1	3.9	4.0	4.8	4.6	4.7
29	4.5	4.2	---	4.5	4.1	4.3	4.1	4.1	4.1	4.8	4.8	4.8
30	4.8	4.3	---	4.2	4.1	4.2	4.2	4.1	4.2	4.9	4.9	4.9
31	---	---	---	---	---	---	4.2	4.2	4.2	4.9	4.7	4.8
MONTH	5.9	2.7	4.0	4.8	3.9	4.4	6.4	3.7	4.1	5.6	4.1	4.5

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	4.8	4.7	4.8	4.8	4.7	4.7	4.3	4.2	4.3			
2	4.8	4.7	4.8	4.7	4.7	4.7	4.4	4.2	4.3			
3	4.8	4.6	4.7	5.0	4.7	4.8	4.3	4.0	4.1			
4	4.7	4.6	4.7	5.5	4.8	5.1	4.3	4.2	4.2			
5	4.7	4.6	4.6	4.9	4.3	4.6	4.2	3.9	4.0			
6	4.8	4.7	4.8	4.8	4.7	4.7	4.1	3.9	---			
7	4.7	4.6	4.7	4.9	4.7	4.8	4.2	4.1	4.1			
8	4.7	4.6	4.7	5.1	4.7	4.9	4.3	4.2	---			
9	4.8	4.7	4.7	5.2	4.7	4.8	---	---	---			
10	4.8	4.7	4.8	4.9	4.7	4.8	---	---	---			
11	4.8	4.6	4.8	5.0	4.2	4.5	---	---	---			
12	4.7	4.7	4.7	4.7	4.2	4.3	---	---	---			
13	5.2	4.6	4.8	4.7	4.3	4.6	---	---	---			
14	4.7	4.6	4.7	4.4	3.9	4.2	---	---	---			
15	4.7	4.7	4.7	4.3	4.2	4.3	---	---	---			
16	4.7	4.7	4.7	4.4	4.2	4.4	---	---	---			
17	4.7	4.7	4.7	4.3	4.3	4.3	---	---	---			
18	4.8	4.7	4.7	4.5	4.0	4.4	---	---	---			
19	4.8	4.7	4.7	4.1	3.8	4.1	---	---	---			
20	5.2	4.7	4.9	4.3	4.0	4.1	---	---	---			
21	4.8	4.7	4.7	4.1	3.8	4.0	---	---	---			
22	4.7	4.7	4.7	5.5	4.1	4.6	---	---	---			
23	4.7	4.6	4.7	5.8	5.1	5.5	---	---	---			
24	5.6	4.7	4.9	5.3	4.1	4.5	---	---	---			
25	4.8	4.3	4.5	4.1	4.1	4.1	---	---	---			
26	4.6	4.4	4.5	4.1	4.1	4.1	---	---	---			
27	4.8	4.5	4.7	4.2	4.1	4.1	---	---	---			
28	5.0	4.6	4.7	4.2	4.2	---	---	---	---			
29	---	---	---	4.4	3.8	4.1	---	---	---			
30	---	---	---	4.2	3.9	4.1	---	---	---			
31	---	---	---	4.3	4.1	4.2	---	---	---			
MONTH	5.6	4.3	4.7	5.8	3.8	4.5	---	---	---			
YEAR	6.4	2.7	4.4									

01409095 OYSTER CREEK NEAR BROOKVILLE, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	54	43	48	51	46	49	45	37	41	48	44	46
2	43	42	43	54	49	52	42	35	39	45	39	43
3	43	41	42	54	46	50	42	38	40	41	36	39
4	44	38	42	53	43	48	42	36	39	39	35	38
5	39	38	39	49	41	46	39	33	35	42	38	40
6	39	36	38	52	43	47	36	28	32	43	37	39
7	39	34	37	49	37	45	51	29	40	40	37	38
8	37	32	35	50	43	46	55	52	52	41	37	39
9	63	36	48	53	43	48	56	48	52	40	30	35
10	59	51	50	46	38	43	52	44	47	61	31	48
11	51	42	47	47	40	44	46	42	43	---	---	---
12	54	41	48	46	39	44	44	42	43	57	55	---
13	50	37	44	46	33	37	47	44	46	55	45	50
14	40	36	38	39	32	35	50	43	46	45	39	41
15	44	34	39	42	38	40	44	42	43	42	38	40
16	36	32	34	45	36	41	47	44	46	46	41	43
17	39	32	36	46	36	41	48	44	46	47	42	44
18	43	33	39	45	38	42	47	44	46	47	41	43
19	43	34	38	45	38	42	50	43	46	50	41	44
20	53	33	38	46	41	44	45	42	44	53	42	47
21	63	55	59	49	40	45	49	45	46	53	43	48
22	62	52	58	48	42	45	51	41	46	52	45	49
23	61	48	55	48	42	45	50	44	47	56	43	50
24	52	50	51	46	39	42	49	42	46	54	43	48
25	50	47	49	42	37	40	49	38	44	45	42	44
26	66	49	58	38	32	35	48	40	45	50	40	45
27	74	61	67	34	32	33	44	41	42	40	36	37
28	68	55	62	35	32	34	43	38	40	43	37	40
29	62	48	55	45	34	41	46	43	44	50	44	47
30	54	43	48	45	40	42	50	44	46	53	46	50
31	49	44	46	---	---	---	47	43	45	50	41	45
MONTH	74	32	46	54	32	43	56	28	44	61	30	43

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	44	42	43	57	50	53	45	38	42			
2	46	41	44	58	48	53	49	43	46			
3	43	39	40	57	46	51	49	31	41			
4	39	38	39	52	50	51	49	42	46			
5	43	38	40	54	49	51	59	50	54			
6	47	42	45	54	51	53	62	55	59			
7	48	42	45	57	53	55	58	47	53			
8	46	38	42	60	50	55	51	49	---			
9	46	37	41	58	48	53	---	---	---			
10	40	37	39	54	44	49	---	---	---			
11	42	36	39	54	45	50	---	---	---			
12	42	38	39	54	46	51	---	---	---			
13	44	41	42	52	48	49	---	---	---			
14	47	42	45	54	49	52	---	---	---			
15	47	43	45	54	46	50	---	---	---			
16	48	42	45	53	45	50	---	---	---			
17	50	46	48	52	46	49	---	---	---			
18	52	43	47	61	50	55	---	---	---			
19	46	43	44	65	57	61	---	---	---			
20	48	43	46	63	57	59	---	---	---			
21	51	46	49	63	50	56	---	---	---			
22	47	43	45	68	54	58	---	---	---			
23	45	40	43	75	57	66	---	---	---			
24	63	45	48	58	52	55	---	---	---			
25	67	53	60	62	55	58	---	---	---			
26	61	51	55	60	50	55	---	---	---			
27	55	49	52	58	46	51	---	---	---			
28	56	51	54	51	48	49	---	---	---			
29	---	---	---	49	37	43	---	---	---			
30	---	---	---	43	37	41	---	---	---			
31	---	---	---	43	35	40	---	---	---			
MONTH	67	36	45	75	35	52	---	---	---			
YEAR	75	28	46									

01409150 MILL CREEK NEAR MANAHAWKIN, NJ

LOCATION.--Lat 39°42'54", long 74°16'56", Ocean County, Hydrologic Unit 02040301, at bridge on State Route 72, 0.3 mi (0.5 km) northwest of intersection of State Route 72 and Garden State Parkway, 1.8 mi (2.9 km) northwest of Manahawkin, and 6.5 mi (10.5 km) upstream from mouth.

DRAINAGE AREA.--10.0 mi² (25.9 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
OCT 12...	0920	44	5.1	11.0	5	10.3	50	7	3	.2
JUL 27...	1300	36	5.3	16.0	1	9.0	<20	7	7	1.7
AUG 22...	1245	77	5.7	16.5	1	8.3	<20	39	--	--
SEP 28...	1430	43	5.2	15.0	3	11.2	<20	17	--	--

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
OCT 12...	.7	3.3	.5	1.0	3.2	7.0	6.8	28	7	--
JUL 27...	.7	4.1	.6	--	3.5	6.7	--	32	2	.01
AUG 22...	--	--	--	--	--	--	--	34	0	.02
SEP 28...	--	--	--	--	--	--	--	28	0	.01

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 12...	--	--	--	.30	110	--	.01	--	4.2	.6
JUL 27...	.00	.08	.01	.09	--	.10	.06	.00	6.0	--
AUG 22...	.00	.07	.17	.24	--	.26	--	.00	7.6	--
SEP 28...	.00	.06	.14	.20	--	.21	--	.00	8.0	--

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
OCT 12...	0920	80	30	50	0	2	20	0	0	12	0

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)
OCT 12...	1	0	0	0	540	460	6200	2	4	20

01409150 MILL CREEK NEAR MANAHAWKIN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT 12...	5	.5	.0	2	0	0	10	0	0	.0

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT 12...	0	.2	.9	1.4	.0	.0	.0	.0	.0	0

01409180 FOURMILE BRANCH NEAR BROOKVILLE, NJ

LOCATION.--Lat 39°45'24", long 74°16'56", Ocean County, Hydrologic Unit 02040301, at culvert, at outlet of cranberry bog, 1.4 mi (2.2 km) west of Barnegat Estates, 2.2 mi (3.5 km) southeast of Brookville, and 2.6 mi (4.2 km) south of Wells Mills.

DRAINAGE AREA.--1.44 mi² (3.73 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI (MPN)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
JUN												
01...	1450	53	4.4	22.5	2	8.0	.4	<2	<2	0	0	0
27...	1425	53	4.0	23.5	1	3.5	.7	8	<2	0	0	0
JUL												
28...	1320	50	4.3	20.5	1	5.1	.7	8	5	0	0	0
AUG												
22...	1200	57	4.3	21.5	1	5.0	1.1	13	6	0	0	0
SEP												
28...	1140	64	4.0	21.0	1	3.6	1.5	<2	13	0	0	0

DATE	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)
JUN											
01...	.0	31	0	.01	.00	.00	.36	.36	.37	5.7	.00
27...	.0	35	5	.00	.00	.00	.39	.39	.39	5.9	.00
JUL											
28...	.0	42	2	.00	.00	.00	.34	.34	.34	5.8	.00
AUG											
22...	.0	37	2	.00	.00	.00	.37	.37	.37	8.2	.00
SEP											
28...	.0	51	0	.01	.00	.02	.26	.28	.29	8.2	.00

01409200 FOUR MILE BRANCH NEAR MANAHAWKIN, NJ

LOCATION.--Lat 39°43'47", long 74°15'54", Ocean County, Hydrologic Unit 02040301, at bridge on northbound lane of New Jersey Garden State Parkway, 1.7 mi (2.7 km) upstream from mouth, 2.3 mi (3.7 km) north of Manahawkin, and 4.9 mi (7.9 km) east of Warren Grove.

DRAINAGE AREA.--5.24 mi² (13.57 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
JUN										
01...	1320	45	6.0	20.0	3	7.8	.5	<20	<2	32
27...	1120	46	6.2	24.0	2	9.2	1.1	<20	4	55
JUL										
27...	1330	48	5.7	23.0	3	8.7	1.0	50	4	34
AUG										
22...	1210	47	5.9	21.0	1	8.3	1.4	40	23	28
SEP										
29...	1330	46	5.7	17.0	10	8.6	3.3	80	33	38

DATE	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN										
01...	4	.06	.00	.02	.11	.13	.19	6.5	--	.00
27...	6	.06	.00	.01	.41	.42	.48	5.3	.01	.00
JUL										
27...	0	.03	.00	.01	.26	.27	.30	5.1	--	.00
AUG										
22...	1	.02	.00	.04	.81	.85	.87	8.4	--	.01
SEP										
29...	7	.03	.00	.04	.38	.42	.45	9.5	--	.00

01409210 MILL CREEK AT MANAHAWKIN, NJ

LOCATION.--Lat 39°41'43", long 74°15'36", Ocean County, Hydrologic Unit 02040301, at outlet of Manahawkin Lake in Manahawkin, and 2.3 mi (3.7 km) northeast of Staffordville.

DRAINAGE AREA.--20.4 mi² (52.8 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
JUN										
01...	1230	43	6.5	20.5	2	8.9	.3	20	4	--
27...	1050	44	6.5	24.0	2	8.5	.9	<20	9	--
JUL										
27...	1210	99	5.9	22.0	2	8.0	1.0	80	33	--
AUG										
22...	1130	57	5.6	21.0	3	8.7	.6	<20	5	--
SEP										
28...	1330	50	5.8	19.5	4	8.9	.8	<20	14	8

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
JUN										
01...	--	--	--	--	--	--	--	37	6	.06
27...	--	--	--	--	--	--	--	60	3	.06
JUL										
27...	--	--	--	--	--	--	--	58	1	.07
AUG										
22...	--	--	--	--	--	--	--	49	3	.04
SEP										
28...	1.4	1.2	6.4	.9	.0	7.2	5.2	56	0	.06

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN										
01...	.00	.05	.03	.08	--	.14	7.2	--	--	.00
27...	.00	.08	.22	.30	--	.36	5.7	--	--	.00
JUL										
27...	.01	.08	.08	.16	--	.24	11	--	--	.00
AUG										
22...	.00	.01	.31	.32	--	.36	7.2	--	--	.00
SEP										
28...	.00	.06	.04	.10	220	.16	9.1	5.9	.13	.00

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)
SEP										
28...	1330	100	0	0	0	0	<10	40	0	2

01409210 MILL CREEK AT MANAHAWKIN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)
SEP 28...	<10	2	<10	360	210	2	50	30	0	<.5

DATE	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)
SEP 28...	.0	5	<10	0	30	0	0	0	.0	0

DATE	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
SEP 28...	160	49	1900	.5	.0	.0	.0	.0	0

01409270 GOVERNORS BRANCH NEAR STAFFORD FORGE, NJ

LOCATION.--Lat 39°41'06", long 74°21'34", Ocean County, Hydrologic Unit 02040301, at bridge on State Highway 539, 2.5 mi (4.0 km) northwest of Stafford Forge, 4.2 mi (6.8 km) south of Warren Grove, and 5.4 mi (8.7 km) west of Manahawkin.

DRAINAGE AREA.--2.09 mi² (5.41 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
JUN										
01...	1410	25	5.6	16.0	5	7.2	.2	<20	350	10
27...	1200	25	5.5	18.0	20	8.2	.4	<20	<2	40
JUL										
28...	1015	26	4.6	15.0	1	7.2	.6	<20	2	29
AUG										
22...	1400	35	5.2	17.0	1	8.3	.3	20	7	27
SEP										
29...	1030	29	5.2	13.5	0	8.4	.7	20	130	18

DATE	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN									
01...	3	.05	.00	.01	.00	.01	.06	6.3	.01
27...	2	.15	.00	.05	.32	.37	.52	6.1	.00
JUL									
28...	7	.07	.00	.01	.20	.21	.28	6.3	.00
AUG									
22...	0	.06	.00	.00	.19	.19	.25	5.2	.00
SEP									
29...	0	.05	.00	.01	.05	.06	.11	6.0	.00

01409280 WESTECUNK CREEK AT STAFFORD FORGE, NJ

LOCATION.--Lat 39°40'00", long 74°19'12", Ocean County, Hydrologic Unit 02040301, 30 ft (9 m) downstream from dam, 0.2 mi (0.3 km) south of Stafford Forge, 1.2 mi (1.9 km) below Log Swamp Branch, and 2.0 mi (3.2 km) west of Staffordville.

DRAINAGE AREA.--16.0 mi^2 (41.4 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1973 to current year. Occasional low-flow measurements, water years 1969-73, at site 500 ft (150 m) downstream.

GAGE.--Water-stage recorder and wooden control. Altitude of gage is 20 ft (6.1 m), from topographic map.

REMARKS.--Discharge records poor. Flow regulated at times by cranberry bogs directly upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 60 ft^3/s (1.70 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
July 10	1700	69	1.95	2.84	0.866
July 17	1215	64	1.81	2.77	0.844
Aug. 9	1745	*94	2.66	3.14	0.957

Minimum discharge, 11 ft^3/s (0.31 m^3/s) July 24, gage height, 2.00 ft (0.610 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 94 ft^3/s (2.66 m^3/s) Dec. 22, 1973, Aug. 9, 1977; maximum gage height, 3.14 ft (0.957 m) Aug. 9, 1977. No flow part of May 17, 1974.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	33	23	20	17	36	30	24	18	18	16	22
2	24	31	23	19	17	32	32	23	18	17	19	21
3	22	29	17	19	17	30	37	23	18	17	19	20
4	22	29	20	19	18	31	37	23	16	18	56	20
5	21	27	21	18	19	33	44	25	18	18	42	25
6	20	26	21	18	18	32	43	26	20	17	41	60
7	20	26	27	19	18	31	38	27	20	18	30	60
8	19	25	34	19	17	29	35	25	20	18	33	51
9	27	24	31	19	17	27	32	24	23	18	36	41
10	29	25	29	36	17	26	31	23	30	19	36	48
11	24	24	26	53	18	26	30	23	25	17	16	38
12	21	24	25	53	19	27	29	22	22	13	17	25
13	21	24	25	37	19	27	29	21	20	14	15	27
14	21	23	23	34	19	30	27	20	20	14	15	24
15	20	24	22	35	23	26	26	20	21	14	20	26
16	20	24	21	33	24	24	25	21	21	13	19	27
17	21	23	20	31	23	21	24	22	20	15	22	31
18	24	23	20	31	23	26	24	21	20	15	36	31
19	23	23	19	31	23	36	23	20	19	16	19	27
20	25	22	20	31	24	31	24	20	18	14	17	25
21	42	22	22	55	24	30	23	20	19	15	18	23
22	37	22	24	31	23	37	24	22	18	15	18	23
23	32	22	21	31	23	42	24	33	18	14	17	20
24	29	22	20	29	25	41	24	23	19	13	26	23
25	30	22	19	19	44	40	25	21	19	12	55	27
26	38	22	21	19	46	36	25	21	17	16	43	26
27	38	22	20	18	43	35	25	20	17	15	31	29
28	34	22	20	19	40	35	25	21	18	15	24	29
29	32	27	20	18	---	34	26	20	19	15	22	27
30	30	25	19	18	---	33	25	18	20	16	21	25
31	34	---	19	18	---	33	---	18	---	16	23	---
TOTAL	826	737	692	850	658	977	866	690	591	485	822	901
MEAN	26.6	24.6	22.3	27.4	23.5	31.5	28.9	22.3	19.7	15.6	26.5	30.0
MAX	42	33	34	55	46	42	44	33	30	19	56	60
MIN	19	22	17	18	17	21	23	18	16	12	15	20
CFSM	1.66	1.54	1.39	1.71	1.47	1.97	1.81	1.39	1.23	.98	1.66	1.88
IN.	1.92	1.71	1.61	1.98	1.53	2.27	2.01	1.60	1.37	1.13	1.91	2.09

CAL YR 1976 TOTAL 10243.6 MEAN 28.0 MAX 58 MIN 7.6 CFSM 1.75 IN 23.81
WTR YR 1977 TOTAL 9095.0 MEAN 24.9 MAX 60 MIN 12 CFSM 1.56 IN 21.14

01409282 WESTECUNK CREEK AT WEST CREEK, NJ

LOCATION.--Lat 39°38'17", long 74°18'19", Ocean County, Hydrologic Unit 02040301, at bridge on U.S. Route 9, 0.8 mi (1.3 km) south of Spraguetown, and 0.4 mi (0.6 km) upstream from confluence with Uriah Branch.

DRAINAGE AREA.--20.6 mi² (53.4 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 12...	1100	43	5.7	13.0	4	8.8	1.0	230	2	4
MAY 17...	1230	37	4.9	18.0	2	10.1	<.5	50	12	6
JUL 28...	1100	39	--	--	1	--	--	--	--	4
AUG 24...	1015	53	5.9	19.5	1	8.0	--	790	350	--
SEP 29...	1140	211	--	--	1	--	--	--	--	--
29...	1145	211	5.0	16.0	1	8.5	.7	50	49	25

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT 12...	.3	.8	3.5	.6	.9	4.9	5.3	6.8	30	6
MAY 17...	1.5	.5	4.0	.8	.0	3.5	6.3	3.7	28	0
JUL 28...	.8	.6	4.3	.6	--	3.0	7.2	--	34	14
AUG 24...	--	--	--	--	--	--	--	--	34	6
SEP 29...	--	--	--	--	--	--	--	--	111	0
29...	3.9	3.6	27	1.7	.0	10	49	5.9	111	0

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 12...	--	--	--	--	.30	--	.01	--	4.2
MAY 17...	--	--	--	--	.40	--	.03	--	5.9
JUL 28...	.04	.00	.01	.01	.02	.06	.00	.00	5.3
AUG 24...	.06	.00	.01	.20	.21	.27	--	.00	7.1
SEP 29...	.02	.00	.02	.18	.20	.22	--	.00	8.9
29...	.02	.00	.01	.00	.01	.03	.02	.00	--

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
OCT 12...	1100	70	10	60	0	20	1	0	1	0
MAY 17...	1230	--	--	90	1	0	0	0	0	5
SEP 29...	1145	--	--	70	0	0	0	0	2	2

01409282 WESTECUNK CREEK AT WEST CREEK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
OCT 12...	500	430	5	20	.5	1	0	0	--
MAY 17...	--	230	3	20	.0	0	0	10	0
SEP 29...	--	360	1	20	<.5	3	0	10	0

01409375 MULLICA RIVER NEAR ATCO, NJ

LOCATION.--Lat 39°47'08", long 74°51'38", Camden County, Hydrologic Unit 02040301, on left bank of small lake 50 ft (15 m) downstream from bridge on Jackson-Medford Road, 0.7 mi (1.1 km) north of intersection of Route 534 with Jackson-Medford Road, and 1.6 mi (2.6 km) east of Atco.

DRAINAGE AREA.--3.22 mi^2 (8.34 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1975 to current year.
CHEMICAL ANALYSES: February to September 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
FEB 01...	1420	130	6.6	2.0	1	14.6	1.0	<20	2
MAR 21...	1425	47	4.6	6.0	1	11.8	--	<20	<2
APR 04...	1150	83	6.2	12.6	4	10.2	--	<20	170
MAY 02...	1300	85	6.4	17.0	4	9.2	--	<20	130
JUN 14...	1240	73	6.4	20.0	2	9.0	2.0	<20	<2
JUL 28...	1410	80	6.6	25.0	1	7.7	--	<20	11
SEP 28...	1225	71	--	23.0	3	6.3	--	20	23

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
FEB 01...	22	5.6	2.0	14	2.8	11	22	75	0
MAR 21...	9	2.5	.7	2.8	1.0	7.9	4.4	28	3
APR 04...	22	5.9	1.7	6.4	2.3	11	9.7	60	6
MAY 02...	20	5.0	1.8	6.0	2.1	9.7	10	54	17
JUN 14...	18	4.4	1.7	5.1	2.4	10	8.8	118	1
JUL 28...	17	4.1	1.7	5.8	2.7	9.6	9.9	62	3
SEP 28...	20	5.2	1.6	3.8	2.4	14	7.1	44	1

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
FEB 01...	--	--	--	--	1.4	--	.01	--	--
MAR 21...	--	--	--	--	1.1	--	.29	--	3.2
APR 04...	--	--	--	--	2.0	--	.01	--	--
MAY 02...	--	--	--	--	1.3	--	.01	--	5.3
JUN 14...	--	--	--	--	1.4	--	.01	--	5.8
JUL 28...	.14	.01	.06	.37	.43	.58	.06	.08	6.9
SEP 28...	.48	.01	.01	.39	.40	.89	.13	.10	9.1

01409383 MULLICA RIVER AT JACKSON ROAD NEAR INDIAN MILLS, NJ

LOCATION.--Lat 39°46'40", long 74°48'01", Burlington County, Hydrologic Unit 02040301, at bridge on Jackson Road, 0.5 mi (0.8 km) downstream from Alquatka Branch, and approximately 3.3 mi (5.3 km) east of Jackson.

DRAINAGE AREA.--16.8 mi² (43.5 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: March to September 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
MAR 01...	1440	58	4.1	4.0	3	11.4	1.0	<20	<2
APR 04...	1220	66	4.1	10.0	1	9.8	--	<20	12
MAY 02...	1415	83	6.5	14.0	4	9.9	--	--	39
JUN 14...	1400	32	5.0	19.0	4	9.4	2.0	<20	<2
JUL 28...	1320	207	--	--	9	--	--	--	--
SEP 28...	1305	126	--	18.0	6	9.3	--	110	240

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
MAR 01...	4	1.3	.1	2.7	1.4	9.4	5.3	40	3
APR 04...	13	3.7	.8	3.0	1.0	9.8	5.0	35	0
MAY 02...	20	4.9	1.8	5.9	2.1	9.4	9.9	54	18
JUN 14...	7	1.6	.7	2.0	.9	7.7	4.3	29	1
JUL 28...	7	1.8	.6	8.3	.5	13	6.3	94	13
SEP 28...	17	4.0	1.6	4.0	1.1	26	5.2	51	9

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
MAR 01...	--	--	--	--	1.1	--	--	--	6.4
APR 04...	--	--	--	--	2.2	--	.01	--	--
MAY 02...	--	--	--	--	1.4	--	.02	--	6.1
JUN 14...	--	--	--	--	.00	--	.49	--	8.2
JUL 28...	.00	.01	.13	.75	.88	.89	.06	.02	7.2
SEP 28...	.01	.00	.04	.35	.39	.40	.02	.00	9.2

01409387 MULLICA RIVER AT OUTLET OF ATSION LAKE, AT ATSION, NJ

LOCATION.--Lat 39°44'25", long 74°43'37", Burlington County, Hydrologic Unit 02040301, at bridge on U.S. Route 206, at outlet of Atsion Lake, and 0.2 mi (0.3 km) upstream from confluence with Wesickaman Creek.

DRAINAGE AREA.--26.7 mi² (69.2 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
FEB 01...	1255	53	6.2	3.5	2	15.2	1.0	<20	79	10
MAR 21...	0935	47	4.6	8.0	2	7.8	--	<20	<2	11
APR 04...	1030	46	4.5	12.0	2	10.2	<.5	<20	27	9
MAY 02...	1155	85	6.4	16.0	4	9.2	--	20	21	50
JUN 14...	0945	32	5.0	22.0	5	8.1	2.0	--	<2	7
JUL 27...	1400	30	--	24.0	3	7.9	1.0	<20	<2	6
AUG 23...	0905	30	--	20.0	2	7.1	3.0	<20	5	6
SEP 28...	1115	30	--	22.0	2	7.9	--	--	--	7

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
FEB 01...	2.4	1.0	3.4	.9	--	8.6	5.8	--	31	0
MAR 21...	3.1	.8	2.6	1.0	--	7.3	4.2	--	29	6
APR 04...	2.4	.8	2.8	1.0	--	7.7	4.3	--	38	5
MAY 02...	17	1.9	5.9	2.1	--	10	9.7	--	60	12
JUN 14...	1.7	.7	1.9	.7	--	8.0	4.1	--	22	4
JUL 27...	1.4	.6	1.9	.6	--	8.6	3.7	--	32	0
AUG 23...	1.3	.6	1.7	.6	--	6.3	3.4	--	20	5
SEP 28...	1.8	.7	2.4	.7	.0	6.5	4.3	2.8	21	0

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
FEB 01...	--	--	--	--	1.7	--	--	--	--
MAR 21...	--	--	--	--	1.3	--	.03	--	3.8
APR 04...	--	--	--	--	2.0	--	.01	--	--
MAY 02...	--	--	--	--	1.1	--	.01	--	6.8
JUN 14...	--	--	--	--	1.0	--	.01	--	7.1
JUL 27...	.02	.01	.05	.47	.52	.55	.09	.00	6.7
AUG 23...	.01	.00	.01	.49	.50	.51	.01	.01	8.1
SEP 28...	.00	.00	.01	.31	.32	.32	.02	.00	13

01409387 MULLICA RIVER AT OUTLET OF ATSION LAKE, AT ATSION, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
SEP 28...	1115	80	1	30	0	0	2	2

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
SEP 28...	800	2	30	<.5	4	0	10	0

01409400 MULLICA RIVER NEAR BATSTO, NJ

LOCATION.--Lat 39°40'28", long 74°39'55", Atlantic County, Hydrologic Unit 02040301, on right bank 2.4 mi (3.9 km) upstream from Sleeper Branch, and 2.5 mi (4.0 km) north of Batsto.

DRAINAGE AREA.--46.1 mi² (119.4 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: September 1957 to current year.

REVISED DISCHARGE RECORDS.--WRD-NJ 1969: 1958(M), 1960(M), 1967-68(M).

GAGE.--Water-stage recorder. Datum of gage is 11.93 ft (3.636 m) NGVD.

REMARKS.--Discharge records good. Some regulation from upstream cranberry bogs and Atison Lake.

AVERAGE DISCHARGE.--20 years, 110 ft³/s (3.115 m³/s), 32.41 in/yr (823 mm/yr).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 240 ft³/s (6.80 m³/s) Mar. 24; minimum, 14 ft³/s (0.40 m³/s) Aug. 8, gage height, 0.35 ft (0.107 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,380 ft³/s (39.1 m³/s) Sept. 26, 1975, gage height, 5.50 ft (1.676 m); minimum, 7.0 ft³/s (0.20 m³/s) Sept. 6-8, 1966, gage height, 0.28 ft (0.085 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	138	56	63	72	160	92	67	32	24	20	28
2	45	129	53	60	77	155	83	65	33	23	22	28
3	44	123	52	59	72	140	105	65	33	22	18	27
4	47	119	51	62	73	120	110	64	31	23	19	25
5	43	114	62	62	74	110	134	65	31	23	18	24
6	42	107	113	60	70	106	157	74	31	23	18	25
7	41	99	170	56	66	100	150	82	32	25	18	25
8	41	92	150	61	62	96	150	84	32	25	17	25
9	48	81	110	85	61	94	141	88	40	24	15	25
10	53	76	102	115	62	90	130	82	59	23	17	29
11	51	76	97	108	66	86	121	67	55	23	18	29
12	51	76	90	95	70	82	112	67	35	25	17	30
13	58	77	87	97	74	82	103	83	35	27	17	32
14	56	83	83	102	76	86	98	89	34	27	19	24
15	53	87	77	103	78	87	92	85	37	26	20	18
16	46	73	75	90	76	85	87	75	37	25	19	17
17	45	66	72	82	70	86	83	68	34	25	28	19
18	45	64	71	78	66	90	80	64	33	25	25	22
19	43	61	69	73	66	110	75	62	31	21	23	22
20	52	59	72	74	66	107	51	62	28	19	21	23
21	101	57	79	75	66	106	44	62	27	19	21	21
22	144	57	71	73	64	130	49	64	26	18	20	20
23	129	56	70	80	64	200	55	65	26	17	17	20
24	93	55	68	92	94	230	58	66	25	17	23	20
25	90	54	64	84	130	190	64	41	25	17	28	25
26	127	53	75	78	200	160	65	37	26	20	24	26
27	158	53	74	75	200	140	76	35	25	19	23	25
28	150	53	72	84	180	125	81	35	25	18	21	27
29	167	60	71	80	---	122	83	34	26	18	20	26
30	159	61	66	72	---	118	78	32	25	18	20	25
31	150	---	65	68	---	117	---	32	---	19	20	---
TOTAL	2418	2359	2487	2446	2395	3710	2807	1961	969	678	626	732
MEAN	78.0	78.6	80.2	78.9	85.5	120	93.6	63.3	32.3	21.9	20.2	24.4
MAX	167	138	170	115	200	230	157	89	59	27	28	32
MIN	41	53	51	56	61	82	44	32	25	17	15	17
CFSM	1.69	1.71	1.74	1.71	1.86	2.60	2.03	1.37	.70	.48	.44	.53
IN.	1.95	1.90	2.01	1.97	1.93	2.99	2.27	1.58	.78	.55	.51	.59

CAL YR 1976 TOTAL 35522 MEAN 97.1 MAX 463 MIN 28 CFSM 2.11 IN 28.66
WTR YR 1977 TOTAL 23588 MEAN 64.6 MAX 230 MIN 15 CFSM 1.40 IN 19.03

NOTE.--No gage-height record Jan. 25 to Mar. 29.

01409403 WILDCAT BRANCH AT CHESILHURST, NJ

LOCATION.--Lat 39°44'04", long 74°51'33", Camden County, Hydrologic Unit 02040301, at culvert on Old Whitehorse Pike, 0.6 mi (1.0 km) north of Chesilhurst, 1.5 mi (2.4 km) upstream from mouth, and 2.9 mi (4.6 km) southeast of Atco.

DRAINAGE AREA.--1.03 mi² (2.67 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1974 to current year.
CHEMICAL ANALYSES: June to September 1977.

REMARKS.--On August 22, streambed was disturbed while sample was taken.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
01...	1030	59	5.9	16.5	9	5.0	.9	540	>2400	9	0	8
27...	0835	58	5.9	18.5	2	3.3	1.9	17	1600	12	0	10
JUL												
28...	0900	194	6.1	18.0	2	3.2	9.9	>2400	70	11	0	9
AUG												
22...	0930	247	6.5	21.0	0	1.3	>17	>24000	9200	50	0	41
SEP												
28...	0930	145	5.6	18.0	30	2.6	3.9	>2400	>2400	12	0	10

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
01...	20	49	11	.59	.01	.24	.33	.57	1.2	6.7	.06
27...	24	51	30	.41	.02	.26	.54	.80	1.2	6.9	.01
JUL											
28...	14	112	14	.02	.01	.59	.81	1.4	1.4	6.4	.02
AUG											
22...	25	155	870	.00	.00	3.5	18	22	22	13	.01
SEP											
28...	48	89	21	.07	.01	.09	.49	.58	.66	8.6	.01

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JUN												
27...	0835	3	0	10	0	7	3700	7	40	.0	37	30

394348074460900 SLEEPERS BRANCH DIVERSION CHANNEL NEAR ATSION, NJ

LOCATION.--Lat 39°43'48", long 74°46'09", Camden County, Hydrologic Unit 02040301, at culvert pipe on Burnt House Road, 600 ft (183 km) downstream from Sleeper Branch, 2.4 mi (3.9 km) southwest of Atsion, and 4.3 mi (6.9 km) east of Waterford Works.

DRAINAGE AREA.--16.1 mi² (41.7 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: February to September 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI (MPN)	HARD-NESS (CA,MG) (MG/L)
FEB 24...	1345	46	4.5	3.0	1	11.2	1.0	20	--	7
MAR 21...	1305	47	4.6	6.0	2	12.2	--	<20	<2	13
APR 04...	1100	56	4.7	9.0	2	11.8	--	<20	350	13
MAY 02...	1025	138	6.3	13.0	2	10.5	--	20	2	68
JUN 14...	1110	45	6.1	18.0	2	9.9	1.0	20	130	21
JUL 27...	1320	29	--	19.0	2	8.2	2.0	140	540	6
SEP 28...	0935	49	--	17.0	2	8.8	--	490	170	10

DATE	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)
FEB 24...	1.8	.7	1.7	.6	7.9	4.2	27	3	--	--
MAR 21...	3.4	1.0	2.9	1.0	7.6	4.3	28	1	--	--
APR 04...	3.2	1.2	3.9	1.3	7.9	5.8	46	0	--	--
MAY 02...	20	4.3	4.9	3.0	24	11	107	7	--	--
JUN 14...	6.1	1.3	3.6	1.2	3.9	5.8	30	0	--	--
JUL 27...	1.4	.6	1.8	.6	8.4	3.7	32	9	.15	.01
SEP 28...	2.0	1.2	5.3	1.4	7.7	7.4	36	13	.20	.00

DATE	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL KJEL. NITRO-GEN IN BOTTOM MAT. (MG/KG)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOT-TOM MA-TERIAL (C) (G/KG)
FEB 24...	--	--	.80	--	--	--	--	4.2	--
MAR 21...	--	--	1.0	--	--	.30	--	1.7	--
APR 04...	--	--	2.0	--	--	.00	--	--	--
MAY 02...	--	--	1.3	--	--	.00	--	4.2	--
JUN 14...	--	--	1.1	--	--	.00	--	4.8	--
JUL 27...	.04	.40	.44	--	.60	.03	.00	9.1	--
SEP 28...	.02	.38	.40	220	.60	.05	.01	9.2	.5

394348074460900 SLEEPERS BRANCH DIVERSION CHANNEL NEAR ATSION, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)
SEP 28...	0935	0	<10	10	<10	<10	210	6	0	.0	<10	0

DATE	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
SEP 28...	0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0

394150074494500 PUMP BRANCH AT ANCORA, NJ

LOCATION.--Lat 39°41'50", long 74°49'45", Camden County, Hydrologic Unit 02040301 at culvert on unnamed road 0.7 mi (1.1 km) east of Ancora, 0.9 mi (1.4 km) upstream from confluence of Blue Anchor Brook and Albertson Brook, and 1.3 mi (2.1 km) north of Elm.

DRAINAGE AREA.--10.4 mi² (26.9 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories in Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
01...	0935	53	6.2	20.0	3	7.2	.8	8	920	15	0	12
27...	0925	52	6.2	22.0	1	5.8	1.8	17	17	15	0	12
JUL												
28...	0940	53	6.4	20.5	2	4.7	1.5	110	33	10	0	8
AUG												
22...	1015	56	6.2	20.5	1	4.9	.9	110	79	11	0	9
SEP												
28...	1015	60	6.1	19.0	0	5.0	.8	920	350	6	0	5

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
01...	15	64	0	.44	.01	.06	.50	.56	1.0	5.6	.00
27...	15	46	6	.26	.01	.11	.80	.91	1.2	5.4	.00
JUL											
28...	6.4	43	3	.28	.01	.05	.61	.66	.95	6.5	.00
AUG											
22...	11	45	7	.25	.00	.03	.34	.37	.62	4.9	.00
SEP											
28...	7.6	34	0	.00	.00	.00	.05	.05	.05	8.8	.00

DATE	TIME	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JUN										
27...	0925	2	<10	2	2	1700	6	40	110	20

394117074500400 BLUE ANCHOR BROOK AT ANCORA, NJ

LOCATION.--Lat 39°41'17", long 74°50'04", Camden County, Hydrologic Unit 02040301, at bridge on U.S. Route 30, 0.5 mi (0.8 km) southeast of Ancora, 0.7 mi (1.1 km) northwest of Elm, and 1.3 mi (2.1 km) upstream from confluence of Pump Branch and Albertson Brook.

DRAINAGE AREA.--4.86 mi² (12.59 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
01...	0900	131	8.2	20.0	5	8.5	6.3	8	34	41	0	34
27...	1430	138	8.3	29.5	2	7.8	4.8	<20	7	--	--	--
JUL												
27...	0905	105	--	24.0	1	3.3	1.6	110	2	--	--	--
AUG												
24...	0905	85	--	24.0	1	4.2	7.6	--	2	--	--	--
SEP												
27...	0920	90	--	22.0	40	5.0	17	50	920	--	--	--

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
01...	.4	93	5	.00	.00	.18	1.3	1.5	1.5	6.1	.71
27...	--	100	10	.13	.02	.07	1.2	1.3	1.5	7.3	.88
JUL											
27...	--	94	7	.02	.00	1.3	1.7	3.0	3.0	7.1	.00
AUG											
24...	--	74	22	.01	.00	.01	1.5	1.5	1.5	6.7	.00
SEP											
27...	--	67	116	.01	.00	.00	3.3	3.3	3.3	9.5	.00

01409410 ALBERTSON BROOK NEAR HAMMONTON, NJ

LOCATION--Lat 39°41'41", long 74°45'21", Atlantic County, Hydrologic Unit 02040301, at bridge on U.S. Route 206, 3.1 mi (5.0 km) downstream from confluence of Pump Branch and Blue Anchor Brook, 3.5 mi (5.6 km) south of Atsion, adn 5.2 mi (8.4 km) northeast of Hammonton.

DRAINAGE AREA.--19.3 mi² (50.0 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1975 to current year.
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI (MPN)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
JUN										
01...	1445	53	6.2	18.5	3	8.4	--	790	--	42
27...	1105	58	6.2	19.5	2	7.0	1.4	<20	350	51
JUL										
27...	1245	48	--	21.0	2	8.3	1.9	230	1600	36
AUG										
24...	1250	55	--	16.0	1	8.3	1.8	<20	540	37
SEP										
28...	0905	65	--	19.0	5	9.3	1.5	490	240	52

DATE	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)
JUN									
01...	8	.53	.00	.01	.56	.57	1.1	6.1	.01
27...	6	.38	.00	.03	.54	.57	.95	6.3	.06
JUL									
27...	7	.44	.00	.05	.65	.70	1.1	4.0	.02
AUG									
24...	47	.02	.00	.02	.55	.57	.59	8.2	.01
SEP									
28...	25	.39	.00	.03	.88	.91	1.3	7.9	.02

394018074493100 GREAT SWAMP BRANCH AT ELM, NJ

LOCATION.--Lat 39°40'18", long 74°49'31", Camden County, Hydrologic Unit 02040301, at bridge on U.S. Route 30, 0.5 mi (0.8 km) southeast of Elm, 1.5 mi (2.4 km) north of Rosedale, and 2.4 mi (3.9 km) northeast of Winslow.

DRAINAGE AREA.--2.83 mi² (7.33 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
01...	0810	171	6.5	17.0	20	1.6	6.8	14	540	37	0	30
27...	1400	154	6.2	29.5	1	7.0	2.8	<20	27	--	--	--
JUL												
27...	0930	103	--	22.0	2	4.6	1.6	170	<2	--	--	--
AUG												
22...	0940	87	--	22.0	1	4.9	6.0	20	4	--	--	--
SEP												
27...	1010	79	--	21.0	20	4.1	>19	<20	22	-	--	--

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
01...	19	93	47	.05	.01	5.3	7.7	13	13	8.1	.02
27...	--	84	3	.02	.01	4.6	1.2	5.8	5.8	5.8	.00
JUL											
27...	--	80	12	.04	.00	1.3	1.2	2.5	2.5	6.0	.00
AUG											
22...	--	73	46	.01	.00	.02	1.9	1.9	1.9	6.8	.00
SEP											
27...	--	70	58	.03	.00	.01	4.2	4.2	4.2	12	.00

394104074454900 GREAT SWAMP BRANCH NEAR HAMMONTON, NJ

LOCATION.--Lat 39°41'04", long 74°45'49", Atlantic County, Hydrologic Unit 02040301, at bridge on U.S. Route 206, 2.4 mi (3.9 km) upstream from mouth, 3.6 mi (5.8 km) east of Elm, and 3.8 mi (6.1 km) northeast of Hammonton.

DRAINAGE AREA.--8.07 mi² (20.90 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
JUN										
01...	1410	118	5.4	19.5	3	8.4	--	50	49	102
27...	1145	106	5.7	17.0	1	7.8	.6	20	4	74
JUL										
27...	1205	169	--	21.0	2	7.8	.7	<20	5	97
AUG										
24...	1215	153	--	18.0	1	6.3	1.1	<20	540	98
SEP										
27...	1255	187	--	16.0	1	9.7	1.7	20	<2	200

DATE	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN									
01...	0	2.4	.00	.02	.42	.44	2.8	5.7	.00
27...	4	2.2	.00	.01	.24	.25	2.5	3.9	.00
JUL									
27...	3	4.1	.01	.01	.25	.26	4.4	9.2	.00
AUG									
24...	7	4.3	.00	.03	.32	.35	4.7	6.7	.00
SEP									
27...	3	3.3	.00	.06	.17	.23	3.5	8.8	.00

01409411 NESCOCHAGUE CREEK AT PLEASANT MILLS, NJ

LOCATION.--Lat 39°38'29", long 74°39'43", Atlantic County, Hydrologic Unit 02040301, at bridge on sand road in Pleasant Mills, 0.2 mi (0.3 km) upstream from Mullica River, and 0.6 mi (1.0 km) west of Batsto.

DRAINAGE AREA.--43.8 mi² (113.4 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1975 to current year.
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
JUN										
01...	1110	53	6.0	16.5	3	9.1	--	<20	540	39
27...	1315	51	6.6	21.5	2	8.4	1.2	80	6	56
JUL										
28...	1255	45	--	20.0	2	6.8	2.1	50	240	39
AUG										
25...	1315	84	4.7	18.0	2	8.0	--	330	1600	49

DATE	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN									
01...	5	.58	.01	.01	.29	.30	.89	6.2	.01
27...	4	.31	.00	.02	.48	.50	.81	6.3	.02
JUL									
28...	5	.26	.01	.02	.34	.36	.63	7.1	.01
AUG									
25...	2	.33	.00	.17	.48	.65	.98	5.3	.01

393825074393500 MULLICA RIVER AT PLEASANT MILLS, NJ

LOCATION.--39°38'25", long 74°39'35", Burlington County, Hydrologic Unit 02040301, at bridge at Pleasant Mills, 0.3 mi (0.5 km) upstream from confluence with outflow from Nescochague Lake, and 0.6 mi (1.0 km) southwest of Batsto.

DRAINAGE AREA.--127 mi² (329 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 05...	1130	58	5.3	12.0	3	10.2	.0	130	220	8
FEB 17...	1155	140	5.9	1.0	2	12.8	2.0	<20	22	42
MAR 24...	1045	69	4.3	5.0	2	12.1	1.0	<20	7	17
APR 04...	1045	64	4.5	11.0	3	9.0	--	<20	2	20
JUN 13...	1330	47	5.3	18.0	5	9.6	--	50	5	11
JUL 28...	1200	33	--	18.0	3	7.6	--	50	49	7
AUG 25...	1200	60	5.0	18.5	2	7.9	4.0	1700	240	15

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT 05...	1.5	1.0	2.7	.8	--	7.7	5.7	--	35	11
FEB 17...	10	4.1	4.8	3.6	--	26	12	--	97	12
MAR 24...	4.5	1.4	3.4	1.6	--	13	5.8	--	48	5
APR 04...	5.7	1.5	3.5	1.6	--	13	5.8	--	51	7
JUN 13...	2.5	1.1	3.0	1.3	.0	8.9	5.6	4.6	39	5
JUL 28...	1.7	.7	2.4	.8	--	7.0	4.3	--	33	12
AUG 25...	4.0	1.3	3.4	1.6	--	13	4.6	--	37	15

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 05...	--	--	--	--	1.1	--	.05	--	5.7
FEB 17...	--	--	--	--	1.7	--	--	--	--
MAR 24...	--	--	--	--	1.1	--	.02	--	--
APR 04...	--	--	--	--	.80	--	.03	--	--
JUN 13...	--	--	--	--	1.4	--	.01	--	--
JUL 28...	.11	.00	.03	.22	.25	.36	.07	.08	7.0
AUG 25...	.19	.00	.13	.42	.55	.74	.05	.01	4.8

393825074393500 MULLICA RIVER AT PLEASANT MILLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
JUN 13...	1330	110	0	8	1	0	2	4

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
JUN 13...	3200	0	40	.0	17	0	50	0

01409412 HAMMONTON CREEK AT ROUTE 30 AT HAMMONTON, NJ

LOCATION.--Lat 39°37'51", long 74°46'17", Atlantic County, Hydrologic Unit 02040301, at bridge on U.S. Route 30 in Hammonton, at outlet of Hammonton Lake, and 2.0 mi (3.2 km) west of Wescoatville.

DRAINAGE AREA.--2.50 mi² (6.48 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1974, 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI (MPN)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
JUN										
01...	1305	78	7.4	22.5	2	9.2	--	40	33	51
27...	1230	80	7.4	26.0	1	6.5	1.8	<20	4	49
JUL										
27...	1000	72	--	23.0	2	5.7	1.1	20	6	49
AUG										
24...	1015	72	--	21.0	1	7.2	2.1	1300	130	40
SEP										
27...	1040	76	--	19.0	1	7.3	2.2	20	13	42

DATE	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)
JUN									
01...	5	.08	.00	.04	.73	.77	.85	5.9	.00
27...	6	.08	.00	.01	.55	.56	.64	6.9	.01
JUL									
27...	6	.03	.00	.04	.61	.65	.68	5.1	.00
AUG									
24...	8	.25	.08	.01	.56	.57	.90	7.0	.47
SEP									
27...	4	.09	.00	.03	.61	.64	.73	8.1	.00

01409414 HAMMONTON CREEK AT HAMMONTON, NJ

LOCATION.--Lat 39°37'57", long 74°45'39", Atlantic County, Hydrologic Unit 02040301, at bridge on unnamed road in Hammonton, 0.7 mi (1.1 km) downstream from the outlet of Hammonton Lake, and 1.5 mi (2.4 km) west of Wescoatville.

DRAINAGE AREA.--2.70 mi² (6.99 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1974, 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
JUN										
01...	1210	289	6.5	19.5	15	6.0	--	<20	33	188
27...	1410	340	6.9	23.0	20	6.8	4.3	<20	4	188
JUL										
27...	1020	274	--	18.0	6	6.0	4.3	20	2	168
AUG										
24...	1055	185	--	19.0	55	5.2	9.4	5400	920	123
SEP										
27...	1110	218	--	17.0	15	7.9	5.4	20	26	147

DATE	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN									
01...	19	2.0	.08	5.7	3.1	8.8	11	6.2	2.5
27...	14	3.8	.16	13	3.0	16	20	5.0	4.7
JUL									
27...	9	2.0	.14	.99	2.5	3.5	5.6	4.6	1.6
AUG									
24...	60	2.9	.23	1.1	2.1	3.2	6.3	8.6	.94
SEP									
27...	28	3.5	.06	.78	3.0	3.8	7.4	9.8	2.1

01409416 HAMMONTON CREEK AT WESCOATVILLE, NJ

LOCATION.--Lat 39°38'02", long 74°43'05", Atlantic County, Hydrologic Unit 02040301, at bridge 1.1 mi (1.8 km) southwest of Nesco, and 3.8 mi (6.1 km) southwest of Batsto.

DRAINAGE AREA.--9.60 mi^2 (24.86 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1974 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
FEB 17...	1040	139	5.9	2.0	2	12.8	2.0	<20	22	42
MAR 24...	0925	68	4.3	6.0	2	10.1	<.5	50	<2	16
APR 04...	1010	146	6.1	11.0	3	--	--	<20	33	30
JUN 15...	0915	170	6.5	20.0	1	7.6	1.0	80	>2400	21
JUL 27...	1100	269	--	21.0	3	7.9	2.0	<20	<2	44
SEP 27...	1145	217	--	19.0	10	6.4	2.0	<20	8	28

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
FEB 17...	10	4.1	4.8	3.6	25	12	--	98	9
MAR 24...	4.2	1.4	3.2	1.6	14	5.6	--	48	0
APR 04...	10	3.2	11	3.6	18	11	--	82	8
JUN 15...	5.8	1.7	16	3.5	14	18	7.8	99	4
JUL 27...	12	3.3	2.4	5.0	12	29	--	180	5
SEP 27...	7.8	2.1	27	4.8	17	24	--	141	11

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
FEB 17...	--	--	--	--	1.8	--	--	--	--
MAR 24...	--	--	--	--	1.1	--	.03	--	--
APR 04...	--	--	--	--	4.3	--	.78	--	--
JUN 15...	--	--	--	--	1.4	--	1.5	--	4.9
JUL 27...	.03	.00	.03	.66	.69	.72	.08	.00	7.0
SEP 27...	3.5	.06	.81	3.1	3.9	7.5	2.7	2.1	9.2

01409416 HAMMONTON CREEK AT WESCOATVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
JUN 15...	0915	120	2	130	0	0	0	10

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
JUN 15...	1000	6	20	.0	11	0	50	0

01409419 NORTONS BRANCH NEAR SWEETWATER, NJ

LOCATION.--Lat 39°37'12", long 74°41'31", Atlantic County, Hydrologic Unit 02040301, at wooden bridge on unnamed road, 1.2 mi (1.9 km) south of Nesco, 2.9 mi (4.7 km) west of Sweetwater, and 3.0 mi (4.8 km) northeast of Elwood.

DRAINAGE AREA.--2.12 mi² (5.49 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
01...	1145	20	5.3	15.0	3	8.7	.4	49	19	4	0	4
27...	1040	20	5.9	16.0	1	8.5	7.0	240	110	2	0	2
JUL												
28...	1045	25	5.5	14.5	2	9.0	1.4	220	94	2	0	2
AUG												
22...	1115	27	5.4	18.0	1	8.9	.6	920	220	2	0	2
SEP												
28...	1100	43	4.1	16.0	1	8.1	.1	49	33	0	0	0

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
01...	39	19	0	.06	.00	.02	.06	.08	.14	7.2	.00
27...	4.0	24	2	.07	.00	.02	.54	.56	.63	5.0	.01
JUL											
28...	10	76	10	.06	.00	.01	.32	.33	.39	6.1	.00
AUG											
22...	13	24	4	.06	.00	.01	.18	.19	.25	5.3	.00
SEP											
28...	.0	28	0	.06	.00	.01	.14	.15	.21	7.4	.00

DATE	TIME	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JUN										
27...	1040	0	<10	0	4	1000	8	10	6	10

01409430 BATSTO RIVER AT HAMPTON GATE, NJ

LOCATION.--Lat 39°48'03", long 74°40'21", Burlington County, Hydrologic Unit 02040301, at bridge on unnamed road in Hampton Gate, 2.6 mi (4.2 km) northwest of Carranza Memorial, and 3.6 mi (5.8 km) southeast of Tabernacle.

DRAINAGE AREA.--10.6 mi² (27.4 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI- FORM (EC BROTH) (MPN)	FECAL STREP- TOCOCCI (MPN)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)
JUN 01...	0955	31	4.7	19.0	3	8.9	1.6	50	<2	37
JUL 28...	1315	29	5.2	15.0	3	8.3	.8	<20	27	50
AUG 25...	1350	39	--	16.0	2	8.9	--	790	130	25
SEP 26...	1030	41	5.4	18.5	2	9.2	.4	230	79	35

DATE	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)
JUN 01...	1	.31	.00	.00	.24	.29	.60	6.7	.00
JUL 28...	5	.30	.00	.05	.44	.49	.79	5.0	.00
AUG 25...	14	.22	.00	.09	.35	.44	.66	6.0	.00
SEP 26...	0	.23	.00	.03	.14	.17	.40	8.9	.00

01409440 BATSTO RIVER NEAR HAMPTON FURNACE, NJ

LOCATION.--Lat 39°45'19", long 74°40'45", Burlington County, Hydrologic Unit 02040301, at railroad bridge on Central Railroad of New Jersey tracks, 0.9 mi (1.4 km) south of Hampton Furnace, 2.9 mi (4.7 km) southwest of the Carranza Memorial and 4.4 mi (7.1 km) southeast of Indian Mills.

DRAINAGE AREA.--25.6 mi² (66.3 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
02...	1030	28	5.1	17.0	4	2.3	.0	17	240	4	0	4
28...	1300	27	5.0	19.5	2	7.7	.5	33	<3	--	--	--
JUL												
29...	1010	23	4.7	18.5	4	7.3	.5	33	<3	--	--	--
AUG												
23...	0950	29	4.5	18.5	2	8.1	.2	8	8	0	0	0
SEP												
29...	0945	45	4.3	15.5	1	7.7	.5	2	49	0	0	0

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
02...	62	20	2	.12	.00	.03	.15	.18	.30	6.2	.00
28...	--	41	0	.10	.00	.02	.38	.40	.50	7.1	.00
JUL											
29...	--	38	2	.12	.00	.01	.25	.26	.38	8.0	.00
AUG											
23...	.0	25	2	.11	.00	.00	.19	.19	.30	7.0	.01
SEP											
29...	.0	24	0	.10	.00	.01	.00	.01	.11	9.0	.00

01409447 INDIAN MILLS BROOK NEAR INDIAN MILLS, NJ

LOCATION.--Lat 39°48'15", long 74°46'03", Burlington County, Hydrologic Unit 02040301, 1.0 mi (1.6 km) northeast of Dellette, 1.4 mi (2.3 km) northwest of Indian Mills, and approximately 3.5 mi (5.6 km) southeast of Medford Lakes.

DRAINAGE AREA.--2.99 mi^2 (7.74 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
JUN										
06...	0940	41	--	16.0	4	10.1	.9	50	350	38
27...	1020	41	5.3	17.0	2	6.8	1.3	<20	540	41
JUL										
28...	1245	45	5.1	20.0	3	7.5	1.2	170	350	46
AUG										
23...	1405	50	--	18.0	1	8.8	.8	80	23	32

DATE	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN									
06...	22	.18	.01	.28	.43	.71	.90	7.1	.00
27...	16	.27	.01	.18	.58	.76	1.0	7.1	.01
JUL									
28...	2	.31	.00	.08	.44	.52	.83	2.6	.00
AUG									
23...	11	.31	.00	.06	.45	.51	.82	7.8	.00

01409450 SPRINGERS BROOK NEAR INDIAN MILLS, NJ

LOCATION.--Lat 39°46'45", long 74°44'20", Burlington County, Hydrologic Unit 02040301, at State Route 206, 1.1 mi (1.8 km) south of Indian Mills, 2.8 mi (4.5 km) north of Atsion, and 1.9 mi (3.1 km) upstream from Bard Branch.

DRAINAGE AREA.--10.0 mi² (25.9 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1959-63, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI (MPN)	HARD-NESS (CA,MG) (MG/L)
FEB 17...	1435	142	5.9	2.0	2	12.8	2.0	<20	21	25
MAR 21...	0850	46	4.7	6.0	1	11.2	--	<20	<2	8
APR 04...	1315	133	--	9.0	2	9.8	--	20	240	46
MAY 02...	1505	137	6.4	15.0	3	9.6	--	40	79	45
JUN 01...	1315	150	6.4	17.0	3	9.4	<.5	20	350	56
JUL 28...	1400	144	--	20.0	1	6.2	2.0	490	350	55
AUG 23...	1315	143	--	19.0	1	7.2	2.0	20	540	48
SEP 26...	1205	171	5.0	20.0	2	9.3	--	230	920	63

DATE	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	DIS-SOL-VED SUL-FIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)
FEB 17...	6.2	2.4	2.5	2.3	--	25	12	--	83	7
MAR 21...	2.1	.7	2.7	1.0	--	7.4	4.2	--	28	5
APR 04...	12	4.0	3.7	3.2	--	24	10	--	94	8
MAY 02...	11	4.3	5.0	3.0	--	25	11	1.	88	9
JUN 01...	14	5.0	3.7	3.1	.0	27	12	3.6	108	0
JUL 28...	14	4.9	4.2	2.3	--	31	11	--	114	6
AUG 23...	12	4.3	3.4	2.6	--	23	12	--	78	4
SEP 26...	17	5.1	4.2	3.8	--	37	12	--	104	6

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
FEB 17...	--	--	--	--	1.7	--	--	--	7.8
MAR 21...	--	--	--	--	1.3	--	.04	--	2.1
APR 04...	--	--	--	--	20	--	.03	--	--
MAY 02...	--	--	--	--	1.3	--	.02	--	7.0
JUN 01...	--	--	--	--	1.4	--	.03	--	4.9
JUL 28...	--	--	--	--	--	--	--	--	5.0
AUG 23...	.51	.00	.04	.35	.39	.90	.01	.01	6.9
SEP 26...	.21	.00	.02	.30	.32	.53	.03	.01	11

01409450 SPRINGERS BROOK NEAR INDIAN MILLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
JUN								
01...	1315	70	1	40	0	0	0	3

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
JUN								
01...	620	0	30	.0	6	0	70	3

01409455 SPRINGERS BROOK NEAR HAMPTON FURNACE, NJ

LOCATION.--Lat 39°45'19", long 74°41'47", Burlington County, Hydrologic Unit 02040301, at bridge on Hampton Road, 1.3 mi (2.1 km) southwest of Hampton Furnace, 1.7 mi (2.7 km) downstream from Bard Branch and 3.7 mi (6.0 km) southeast of Indian Mills.

DRAINAGE AREA.--18.3 mi² (47.4 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
JUN										
01...	1130	71	5.9	20.0	7	8.1	2.3	230	240	70
JUL										
28...	1445	127	4.5	20.0	8	6.2	1.8	170	34	121
AUG										
24...	1405	--	--	17.0	--	8.8	--	50	350	--
SEP										
26...	1330	142	5.7	15.0	3	8.8	1.2	490	230	91

DATE	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN									
01...	9	.06	.00	.24	.74	.98	1.0	9.2	.00
JUL									
28...	15	.15	.00	.19	.72	.91	1.1	4.7	.00
AUG									
24...	--	--	--	--	--	--	--	--	--
SEP									
26...	0	.08	.00	.03	.36	.39	.47	9.7	.00

01409470 BATSTO RIVER AT QUAKER BRIDGE, NJ

LOCATION.--Lat 39°42'34", long 74°40'00", Burlington County, Hydrologic Unit 02040301, at Quaker Bridge on unnamed road, 2.1 mi (3.4 km) northwest of Penn Swamp Pond, and 1.1 mi (1.8 km) southeast of Lower Forge.

DRAINAGE AREA.--55.7 mi² (144.3 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
FEB										
24...	1150	47	5.5	2.0	1	12.2	1.0	<20	--	7
MAR										
21...	1040	47	4.6	5.0	1	12.8	--	<20	<2	15
APR										
04...	0955	55	4.3	11.0	2	10.6	--	20	4	11
MAY										
02...	0910	139	6.4	13.0	2	10.8	--	<20	9	58
JUN										
13...	1015	34	5.0	19.0	3	10.3	--	<20	14	8
JUL										
28...	0950	22	--	19.0	2	8.3	--	40	8	4
SEP										
28...	1020	30	--	18.0	1	10.3	--	230	70	7

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
FEB										
24...	1.5	.7	2.3	.9	--	7.6	3.8	--	26	0
MAR										
21...	3.8	1.3	2.8	1.0	--	7.7	4.3	--	28	0
APR										
04...	2.9	1.0	2.6	1.3	--	10	4.6	--	37	0
MAY										
02...	16	4.5	5.1	2.9	--	25	11	--	110	7
JUN										
13...	1.9	.7	2.0	.7	.0	5.8	3.7	5.3	31	0
JUL										
28...	.8	.4	2.0	.5	--	5.4	3.3	--	24	2
SEP										
28...	2.0	.6	1.8	.7	--	7.4	3.3	--	21	1

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
FEB									
24...	--	--	--	--	1.0	--	--	--	2.6
MAR									
21...	--	--	--	--	1.3	--	.02	--	2.0
APR									
04...	--	--	--	--	1.5	--	.02	--	--
MAY									
02...	--	--	--	--	1.4	--	.03	--	7.3
JUN									
13...	--	--	--	--	1.4	--	.01	--	5.7
JUL									
28...	.03	.00	.03	.12	.15	.18	.01	.00	7.1
SEP									
28...	.03	.00	.01	.29	.30	.33	.01	.00	9.2

01409470 BATSTO RIVER AT QUAKER BRIDGE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
JUN 13...	1015	100	0	5	0	0	1	2

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
JUN 13...	520	3	30	.0	9	0	30	0

01409500 BATSTO RIVER AT BATSTO, NJ

LOCATION.--Lat 39°38'33", long 74°39'00", Burlington County, Hydrologic Unit 02040301, on right bank 30 ft (9 m) downstream from bridge on State Highway 542 at Batsto, and 1.0 mi (1.6 km) upstream from mouth.

DRAINAGE AREA.--70.5 mi² (182.6 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1927 to current year. Monthly discharge only for April to September 1939, published in WSP 1302.
CHEMICAL ANALYSES: Water years 1925, 1956, 1962-63, 1976 to current year.

REVISED DISCHARGE RECORDS.--WSP 781: Drainage area. WSP 1432: 1930, 1933, 1936, 1938.

GAGE.--Water-stage recorder. Concrete control since Oct. 12, 1939; prior to Mar. 24, 1939, wooden control at site 50 ft (15 m) downstream. Datum of gage is 1.4 ft (0.43 m) NGVD.

REMARKS.--Discharge records excellent. Considerable regulation at times by sluice gates prior to December 1954 and by an automatic Bascule and sluice gate since July 1959 at Batsto Lake 300 ft (91 m) upstream, capacity, about 60,000,000 gal (227,000 m³).

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--50 years, 125 ft³/s (3.540 m³/s), 24.08 in/yr (612 mm/yr).

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 204 ft³/s (5.78 m³/s) Feb. 27; minimum daily, 37 ft³/s (1.05 m³/s) July 25.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,310 ft³/s (37.1 m³/s) Aug. 24, 1933; maximum gage height, 8.7 ft (2.65 m) Aug. 20, 1939, from floodmark; minimum daily discharge, 5.7 ft³/s (0.16 m³/s) Oct. 4, 1959.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	107	60	70	63	166	89	72	48	43	38	48
2	58	109	57	67	62	146	89	70	51	43	42	46
3	55	104	56	66	63	125	98	75	50	42	42	42
4	55	98	55	65	65	112	105	74	48	41	43	39
5	54	93	66	65	67	105	119	74	48	40	44	39
6	50	87	115	62	65	102	123	81	48	41	41	41
7	49	84	190	63	62	99	130	85	51	43	38	46
8	48	80	170	62	61	95	127	81	50	43	38	51
9	60	76	120	61	61	89	115	75	57	43	38	49
10	57	76	110	89	61	86	104	74	67	42	40	46
11	54	73	100	100	63	83	97	76	67	40	41	44
12	51	73	98	110	66	80	92	80	59	42	41	43
13	49	73	96	110	71	81	87	77	55	45	41	42
14	49	74	91	103	79	86	84	73	53	44	40	41
15	48	72	85	98	83	87	80	70	54	41	41	39
16	47	71	82	92	84	84	76	63	56	41	42	39
17	49	70	79	85	81	81	73	61	56	39	43	42
18	51	69	78	82	76	84	73	61	53	38	43	45
19	49	69	76	78	72	92	71	64	51	39	42	45
20	61	67	78	76	72	99	69	58	49	38	42	44
21	80	66	83	74	71	98	69	55	47	38	40	43
22	86	66	83	72	71	113	68	55	47	38	45	44
23	82	65	78	71	70	123	67	55	46	41	41	42
24	74	65	77	70	77	151	67	55	44	38	49	45
25	75	64	75	69	115	160	71	54	45	37	54	49
26	93	64	79	69	158	144	73	53	46	41	48	49
27	104	64	81	68	204	125	74	51	45	42	45	51
28	121	65	81	69	186	111	75	49	45	39	42	49
29	118	68	78	68	---	101	76	50	46	38	40	47
30	110	64	76	66	---	95	77	48	45	39	39	46
31	112	---	74	65	---	91	---	48	---	40	40	---
TOTAL	2110	2276	2727	2365	2329	3294	2618	2017	1527	1259	1303	1336
MEAN	68.1	75.9	88.0	76.3	83.2	106	87.3	65.1	50.9	40.6	42.0	44.5
MAX	121	109	190	110	204	166	130	85	67	45	54	51
MIN	47	64	55	61	61	80	67	48	44	37	38	39

CAL YR 1976 TOTAL 34795 MEAN 95.1 MAX 509 MIN 44
WTR YR 1977 TOTAL 25161 MEAN 68.9 MAX 204 MIN 37

01409500 BATSTO RIVER AT BATSTO, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
FEB 01...	1135	61	38	6.2	2.0	1	14.9	1.0	<20	>2400
MAR 24...	1135	153	70	4.4	4.0	2	12.4	1.0	<20	14
APR 04...	1120	121	--	4.4	12.0	1	10.2	--	<20	<2
JUN 13...	1230	55	38	5.2	21.0	3	8.3	--	<20	9
JUL 28...	1115	35	22	--	22.0	2	9.7	--	20	13
AUG 25...	1100	43	25	5.6	19.0	1	8.3	3.0	80	<2

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
FEB 01...	5	1.3	.5	2.8	.7	6.1	3.7	25	0
MAR 24...	21	5.1	2.0	3.2	1.6	14	5.9	48	3
APR 04...	12	3.2	1.0	2.9	.8	7.4	3.5	32	5
JUN 13...	11	2.9	.8	2.2	1.0	5.7	4.1	24	0
JUL 28...	4	.9	.4	2.0	.5	3.7	3.1	23	6
AUG 25...	6	1.7	.5	2.4	.6	4.1	3.1	22	0

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
FEB 01...	--	--	--	--	1.4	--	.01	--	--
MAR 24...	--	--	--	--	1.1	--	.04	--	--
APR 04...	--	--	--	--	1.1	--	.03	--	--
JUN 13...	--	--	--	--	1.3	--	.02	--	6.3
JUL 28...	.03	.00	.02	.08	.10	.13	.06	.00	8.1
AUG 25...	.00	.00	.00	.14	.14	.14	.00	.00	5.6

01409510 BATSTO RIVER AT PLEASANT MILLS, NJ

LOCATION.--Lat 39°37'55", long 74°38'40", Burlington County, Hydrologic Unit 02040301, on right bank, 0.5 mi (1.6 km) southeast of Pleasant Mills.

DRAINAGE AREA.--73.6 mi^2 (190.6 km^2).

PERIOD OF RECORD.--
TIDE ELEVATIONS: July 1958 to current year. Annual maximum only July 1958 to September 1965, published in WRD-NJ 1965, October 1965 to September 1966, published in WRD-NJ 1966.

GAGE.--Water-stage recorder. Datum of gage is 8.6 ft (2.621 m) NGVD. Gage-height record converted to elevation above or below (-) NGVD for publication.

REMARKS.--Records fair.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 4.12 ft (1.256 m) Sept. 25; minimum recorded, -0.31 ft (-0.094 m) May 21-26, June 4, but may have been lower during period of no gage-height record.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 7.2 ft (2.19 m) Mar. 7, 1962; minimum (1967-77), -0.40 ft (-0.12 m) Oct. 18, 1970.

Summaries of tide elevations during year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Eleveation	3.71	3.14	3.32	3.59	--	--	3.30	3.15	3.08	3.04	2.97	4.12
high tide	Date	1	5	7	10	--	--	5	29	28	29	24	25
Minimum	Elevation	-0.20	-0.04	-0.07	--	--	--	-0.14	-0.31	-0.31	-0.22	-0.21	-0.22
low tide	Date	16	23,24	3,5	--	--	--	23	21-26	4	25	6-9, 30,31	15
Mean high tide		2.57	2.13	1.92	--	--	--	2.32	2.36	2.53	2.45	2.53	2.80
Mean water level		1.51	1.02	0.92	--	--	--	1.14	1.09	1.24	1.11	1.17	1.61
Mean low tide		0.43	0.20	0.23	--	--	--	-0.20	-0.06	-0.04	-0.13	-0.15	0.21

NOTE.--No gage-height record Jan. 17-20, 27-31, Feb. 14 to Mar. 30.

01409515 LUCAS BRANCH NEAR SWEETWATER, NJ

LOCATION.--39°36'23", long 74°39'43", Atlantic County, Hydrologic Unit 02040301, at bridge on Indian Cabin Road, 1.5 mi (2.4 km) southwest of Sweetwater, 1.9 mi (3.0 km) upstream from mouth, and 3.3 mi (5.3 km) northeast of Elwood.

DRAINAGE AREA.--0.66 mi² (1.71 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by New Jersey Department of Health, Division of Laboratories and Epidermiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
01...	1230	29	4.7	16.0	2	8.1	.2	13	350	0	0	0
27...	1150	25	4.6	17.0	1	7.2	.5	13	5	0	0	0
JUL												
28...	1125	28	4.8	15.0	1	7.2	7.0	110	49	1	0	1
AUG												
22...	1210	30	4.6	20.0	8	6.6	2.0	79	21	0	0	0
SEP												
28...	1140	61	4.0	16.5	1	8.0	.1	79	350	0	0	0

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
01...	.0	18	0	.00	.00	.00	.18	.18	.18	5.8	.00
27...	.0	28	2	.01	.00	.03	.15	.18	.19	7.1	.00
JUL											
28...	25	26	4	.01	.00	.05	.14	.19	.20	7.0	.00
AUG											
22...	.0	42	7	.02	.00	.00	.58	.58	.60	8.1	.00
SEP											
28...	.0	27	3	.02	.00	.01	.02	.03	.05	13	.00

01409525 LUCAS BRANCH AT SWEETWATER, NJ

LOCATION.--Lat 39°37'04", long 74°37'48", Atlantic County, Hydrologic Unit 02040301 at bridge on Pleasant Mills-Weekstown Road in Sweetwater, 0.2 mi (0.3 km) upstream from mouth, 2.2 mi (3.5 km) northwest of Weekstown, and 5.1 mi (8.2 km) northeast of Elwood.

DRAINAGE AREA.--3.94 mi² (10.20 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
01...	1250	44	4.3	16.0	2	9.1	.1	130	540	0	0	0
27...	1220	46	4.2	19.0	1	8.1	1.2	240	350	0	0	0
JUL												
26...	1150	51	4.4	16.0	2	8.0	1.0	350	240	0	0	0
AUG												
22...	1230	51	4.2	19.0	1	7.8	.3	>2400	540	0	0	0
SEP												
28...	1200	76	3.8	17.5	1	8.5	.2	540	280	0	0	0

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
01...	.0	21	0	.00	.00	.00	.11	.11	.11	6.0	.00
27...	.0	34	5	.06	.00	.03	.23	.26	.32	5.1	.00
JUL											
28...	.0	37	0	.05	.00	.04	.13	.17	.22	4.7	.00
AUG											
22...	.0	34	4	.06	.00	.03	.21	.24	.30	5.1	.00
SEP											
28...	.0	40	9	.02	.00	.00	.07	.07	.09	6.5	.00

DATE	TIME	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JUN										
27...	1220	0	<10	2	2	410	5	10	7	50

01409535 MULLICA RIVER AT GREEN BANK, NJ

LOCATION.--Lat 39°36'43", long 74°35'22", Burlington County, Hydrologic Unit 02040301, at bridge on State Highway 563 in Green Bank, 1.6 mi (2.6 km) west of Lower Bank Church, 1.6 mi (2.6 km) northeast of Weekstown, and 4.6 mi (7.4 km) southwest of Maxwell.

DRAINAGE AREA.--243 mi² (629 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN 01...	1445	1760	5.6	21.0	9	7.6	.8	79	130	5	0	4
27...	1435	566	5.5	26.0	3	6.8	1.5	1600	79	2	0	2
JUL 28...	1410	320	6.1	24.0	9	7.2	2.6	33	11	5	0	4
AUG 22...	1425	4540	6.3	23.0	2	7.6	1.3	170	23	7	0	6
SEP 28...	1340	7320	6.2	21.0	4	7.4	.8	220	49	10	0	8

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN 01...	20	970	15	.09	.00	.09	.55	.64	.73	6.3	.00
27...	10	376	22	.09	.00	.03	.58	.61	.70	6.4	.01
JUL 28...	6.4	1930	23	.02	.00	.01	.64	.65	.67	6.2	.00
AUG 22...	5.6	2540	42	.00	.00	.01	.51	.52	.52	6.9	.00
SEP 28...	10	4260	21	.01	.00	.01	.13	.14	.15	9.0	.00

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JUN 27...	1435	2	0	10	0	4	3400	5	30	.0	26	20

01409540 PINE CREEK AT WEEKSTOWN, NJ

LOCATION.--Lat 39°35'16", long 74°35'55", Atlantic County, Hydrologic Unit 02040301, at bridge on State Highway 563, 0.4 mi (0.6 km) southeast of Weekstown, 1.4 mi (2.3 km) upstream from mouth, and 2.6 mi (4.2 km) southwest of Lower Bank Church.

DRAINAGE AREA.--2.80 mi^2 (7.25 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
01...	1315	60	4.1	18.5	6	4.9	1.3	49	70	0	0	0
27...	1250	66	4.0	20.5	6	4.9	1.4	2	34	0	0	0
JUL												
28...	1220	58	5.2	18.0	20	.2	9.3	--	--	5	0	4
AUG												
22...	1250	114	4.9	20.5	4	.3	4.4	50	>24000	2	0	2
SEP												
28...	1225	132	3.6	19.0	2	6.9	.7	33	540	0	0	0

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
01...	.0	43	0	.04	.00	.05	.80	.85	.89	14	.01
27...	.0	45	20	.01	.02	.10	.88	.98	1.0	12	.01
JUL											
28...	50	125	152	.00	.00	1.8	5.1	6.9	6.9	8.1	.12
AUG											
22...	40	87	43	.01	.00	5.6	5.4	11	11	8.9	.19
SEP											
28...	.0	48	4	.00	.00	.00	.25	.25	.25	10	.00

DATE	TIME	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JUN										
27...	1250	0	10	2	3	5000	19	10	8	20

01409600 LANDING CREEK NEAR EGG HARBOR CITY, NJ

LOCATION.--Lat 39°33'25", long 74°36'10", Atlantic County, Hydrologic Unit 02040301, at bridge on unnamed road, 3.1 mi (5.0 km) north of Germania, an7 200 ft (61 m) upstream from confluence with outflow from Egg Harbor City Lake.

DRAINAGE AREA.--14.7 mi² (36.3 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1974, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 05...	0940	539	5.6	17.0	5	8.2	7.0	80	350	28
FEB 17...	1310	139	5.9	3.0	4	11.6	2.0	--	--	42
MAR 24...	1210	70	4.3	5.0	3	10.4	1.1	20	7	15
APR 04...	1200	82	4.7	11.0	2	9.1	--	<20	2	19
AUG 25...	1015	56	4.5	22.0	1	8.1	--	50	23	9

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT 05...	6.0	3.2	78	2.9	.0	13	140	19	284	7
FEB 17...	10	4.1	4.8	3.6	--	25	12	--	95	9
MAR 24...	3.8	1.4	3.2	1.6	--	15	4.4	--	46	9
APR 04...	5.1	1.6	6.3	1.6	--	15	8.0	--	64	2
AUG 25...	1.6	1.1	4.5	.9	--	9.5	12	--	33	4

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 05...	--	--	--	--	1.4	--	.42	--	6.3
FEB 17...	--	--	--	--	1.5	--	--	--	--
MAR 24...	--	--	--	--	1.4	--	.03	--	--
APR 04...	--	--	--	--	.80	--	.07	--	--
AUG 25...	.02	.00	.02	.18	.20	.22	.01	.01	4.1

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
OCT 05...	0940	440	300	140	0	6	100	1	0	20	0

01409600 LANDING CREEK NEAR EGG HARBOR CITY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)
OCT 05...	4	0	0	10	820	320	7600	8	10	70

DATE	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT 05...	30	<.5	.2	14	10	0	40	60	0	6.2

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT 05...	130	4.1	1.2	.0	9.8	.0	.0	.0	.0	0

01409605 LANDING CREEK NEAR WEEKSTOWN, NJ

LOCATION.--Lat 39°34'48", long 74°34'52", Atlantic County, Hydrologic Unit 02040301, at bridge on Clarks Landing Road, 1.5 mi (2.4 km) southeast of Weekstown, 2.2 mi (3.5 km) upstream from mouth, and 2.4 mi (3.9 km) southwest of Lower Bank.

DRAINAGE AREA.--24.2 mi² (62.7 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
01...	1335	173	5.8	15.5	7	7.6	.9	33	110	10	0	8
27...	1315	83	6.1	19.0	8	7.3	1.3	33	49	7	0	6
JUL												
28...	1305	184	6.2	17.0	5	7.8	1.3	110	27	6	0	5
AUG												
22...	1320	124	6.1	18.5	7	7.9	.5	700	240	5	0	4
SEP												
28...	1240	163	4.9	17.5	4	7.1	.5	79	240	1	0	1

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
01...	25	112	11	.96	.04	.43	.39	.82	1.8	5.3	.28
27...	8.9	72	11	.76	.00	.03	.54	.57	1.3	6.5	.21
JUL											
28...	6.1	98	0	.81	.00	.02	.36	.38	1.2	7.5	.34
AUG											
22...	6.4	73	5	.66	.00	.01	.43	.44	1.1	6.8	.26
SEP											
28...	20	95	0	.76	.01	.19	.32	.51	1.3	9.5	.14

DATE	TIME	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JUN										
27...	1315	0	<10	3	4	1900	13	10	7	30

01409620 TAR KILN BRANCH NEAR PORT REPUBLIC, NJ

LOCATION.--Lat 39°32'49", long 74°31'56", Atlantic County, Hydrologic Unit 02040301, at bridge on Clarks Landing Road 1.8 mi (2.9 km) upstream from mouth, 2.7 mi (4.3 km) northwest Port Republic, and 4.0 mi (6.4 km) south of Lower Bank.

DRAINAGE AREA.--0.95 mi² (2.46 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI (MPN)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
JUN												
01...	1400	51	5.1	14.0	1	7.6	.8	50	<2	2	0	2
27...	1350	40	5.1	15.5	1	7.6	3.0	7	130	2	0	2
JUL												
28...	1335	49*	5.3	15.5	0	7.3	1.1	170	33	2	0	2
AUG												
22...	1345	47	5.0	15.5	1	7.3	.2	170	130	1	0	1
SEP												
28...	1300	48	4.5	15.0	1	7.0	.0	63	33	0	0	0

DATE	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)
JUN											
01...	31	35	0	1.3	.00	.00	.11	.11	1.4	3.2	.00
27...	25	35	11	1.4	.00	.01	.10	.11	1.5	4.2	.00
JUL											
28...	16	39	0	1.3	.00	.01	.22	.23	1.5	5.4	.00
AUG											
22...	16	34	1	1.0	.00	.01	.11	.12	1.1	6.0	.01
SEP											
28...	.0	33	12	.77	.00	.00	.08	.08	.85	8.7	.00

DATE	TIME	TOTAL CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JUN										
27...	1350	0	<10	3	3	40	4	10	10	20

01409675 GATES BRANCH NEAR CHATSWORTH, NJ

LOCATION.--Lat 39°50'55", long 74°31'27", Burlington County, Hydrologic Unit 02040301, at bridge on unnamed road 0.8 mi (1.3 km) upstream from Reeds Branch, 1.4 mi (2.2 km) southeast of Hedger House, and 2.2 mi (3.5 km) north of Chatsworth.

DRAINAGE AREA.--1.46 mi (3.78 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
01...	1535	75	3.9	15.0	2	.4	.6	22	33	0	0	0
27...	1515	127	3.8	18.0	1	1.0	5.9	<2	7	0	0	0
AUG												
22...	1415	135	3.7	19.5	3	3.4	.8	<20	26	0	0	0
SEP												
28...	1415	214	3.4	18.0	1	1.4	.5	17	63	0	0	0

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
01...	.0	37	0	.03	.00	.00	.47	.47	.50	7.0	.00
27...	.0	66	11	.00	.00	.00	.44	.44	.44	5.1	.00
AUG											
22...	.0	58	4	.00	.00	.05	.55	.60	.60	5.4	.00
SEP											
28...	.0	62	1	.00	.00	.07	.21	.28	.28	14	.00

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JUN												
27...	1515	2	0	<10	3	6	2200	5	20	.0	9	80

01409690 WEST BRANCH WADING RIVER AT CHATSWORTH, NJ

LOCATION.--Lat 39°48'51", long 74°32'50", Burlington County, Hydrologic Unit 02040301, at bridge on State Highway 532, 150 ft (46 m) downstream from outlet of Chatsworth Lake, 0.7 mi (1.1 km) west of Chatsworth, and 2.0 mi (3.2 km) northwest of Dukes Bridge.

DRAINAGE AREA.--9.24 mi² (23.93 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (FC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
01...	1500	31	6.3	13.0	10	.4	1.8	2	22	13	0	11
27...	1440	31	6.7	14.5	4	1.0	.8	2	<2	15	0	12
JUL												
28...	1410	32	6.2	15.0	8	1.4	1.2	<2	240	12	0	10
AUG												
22...	1345	36	6.0	20.5	7	5.2	3.9	2	4	13	0	11
SEP												
28...	1345	36	5.7	19.0	20	.2	.8	130	130	7	0	6

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
01...	10	44	11	.01	.00	.20	.26	.46	.47	6.7	.00
27...	4.8	38	15	.00	.00	.14	.33	.47	.47	5.5	.00
JUL											
28...	12	42	6	.00	.00	.01	.24	.25	.25	5.2	.00
AUG											
22...	21	44	0	.00	.00	.00	.84	.84	.84	8.5	.00
SEP											
28...	22	36	21	.00	.00	.26	.04	.30	.30	15	.00

01409700 WEST BRANCH WADING RIVER AT ROUTE 563 AT DUKES BRIDGE, NJ

LOCATION.--Lat 39°47'23", long 74°32'10", Burlington County, Hydrologic Unit 02040301, at bridge on State Highway 563, 0.7 mi (1.1 km) west of Dukes Bridge, 2.0 mi (3.2 km) south of Chatsworth, and 3.1 mi (5.0 km) southeast of Apple Pie Hill.

DRAINAGE AREA.--12.6 mi^2 (32.6 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
01...	1435	29	4.7	19.0	4	6.3	.7	49	540	1	0	1
27...	1410	25	4.8	24.5	3	7.3	.9	13	13	2	0	2
JUL												
28...	1350	43	4.6	21.5	4	7.5	1.0	23	350	1	0	1
AUG												
22...	1320	28	4.7	21.5	2	6.8	.5	13	2	2	0	2
SEP												
28...	1245	33	4.6	19.5	2	6.6	.5	79	79	0	0	0

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
01...	38	31	6	.01	.00	.01	.33	.34	.35	7.3	.00
27...	51	43	5	.01	.00	.00	.48	.48	.49	6.0	.00
JUL											
28...	40	24	2	.00	.00	.00	.19	.19	.19	4.8	.00
AUG											
22...	64	24	4	.01	.00	.00	.21	.21	.22	7.1	.00
SEP											
28...	.8	20	5	.01	.00	.03	.17	.20	.21	12	.00

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JUN												
27...	1410	4	2	<10	0	5	3400	8	20	.2	30	20

01409810 WEST BRANCH WADING RIVER NEAR JENKINS, NJ

LOCATION.--Lat 39°41'17", long 74°32'54", Burlington County, Hydrologic Unit 02040301, on right bank 900 ft (274 m) downstream from Godfrey Bridge, 2.2 mi (3.5 km) downstream from Little Hospitality Brook, and 1.2 mi (1.9 km) southwest of Jenkins.

DRAINAGE AREA.--84.1 mi² (217.8 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 29.09 ft (8.87 m) NGVD.

REMARKS.--Discharge records excellent. Some regulation by cranberry bogs and small ponds.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 419 ft³/s (11.9 m³/s) May 13, gage height, 13.56 ft (4.133 m); minimum, 22 ft³/s (0.62 m³/s) July 24, gage height, 10.16 ft (3.097 m).

REVISIONS.--Revised daily discharges, in cubic feet per second, for August and September for water year 1976 are given below. These figures supercede those published in the report for 1976.

Aug. 10	389	Aug. 28	43	Sept. 1	37	Sept. 19	63
11	372	29	43	2	36	20	48
12	253	30	43	3	37	21	40
13	110	31	38	4	35	22	38
14	125	TOTAL	2976	5	35	23	34
15	137	MEAN	96.0	6	35	24	36
16	187	MAX	389	7	34	25	35
17	180	MIN	32	8	33	26	45
18	140	CFSM	1.14	9	33	27	62
19	107	IN	1.32	10	37	28	50
20	84			11	41	29	41
21	74			12	40	30	41
22	66			13	40	TOTAL	1214
23	61			14	36	MEAN	40.5
24	57			15	32	MAX	63
25	53			16	35	MIN	32
26	51			17	51	CFSM	.48
27	42			18	54	IN	.54

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 964 ft³/s (27.3 m³/s) Sept. 26, 1975, gage height, 15.20 ft (4.633 m); minimum, 22 ft³/s (0.62 m³/s) July 24, 1977, gage height, 10.16 ft (3.097 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	192	59	81	101	168	90	78	47	35	27	50
2	74	156	50	80	116	172	94	98	47	38	32	42
3	71	138	43	78	102	172	128	107	43	33	30	37
4	96	125	39	79	93	135	133	98	51	32	32	34
5	79	110	39	79	106	131	221	98	69	32	30	36
6	57	104	40	77	91	122	257	112	57	32	28	135
7	55	99	72	78	83	122	259	111	57	34	27	221
8	71	92	112	78	78	118	194	105	48	35	25	251
9	86	80	86	76	74	114	174	90	84	36	25	169
10	100	80	81	146	74	110	159	87	130	31	28	114
11	66	78	79	238	84	104	132	76	108	29	40	83
12	55	75	74	189	88	98	114	130	89	32	36	66
13	53	73	70	156	88	97	110	366	72	34	33	53
14	85	72	62	136	91	103	103	192	66	30	35	51
15	74	71	62	139	89	102	95	104	68	28	39	46
16	77	69	62	134	79	98	88	106	69	28	34	44
17	50	69	71	127	74	94	85	121	65	28	39	51
18	74	70	73	118	69	114	83	106	62	27	47	74
19	70	71	71	109	68	139	80	96	57	27	40	72
20	80	69	72	103	72	112	77	77	47	30	38	81
21	276	66	82	97	72	110	76	66	45	31	35	78
22	253	66	71	114	68	180	72	60	41	28	34	65
23	225	63	72	146	66	351	69	57	41	25	33	58
24	185	62	77	118	72	395	75	54	40	23	41	62
25	150	62	75	102	206	314	84	54	38	23	60	75
26	208	63	91	99	266	208	85	48	39	32	48	78
27	251	66	94	99	195	170	84	45	37	27	46	92
28	211	58	89	115	180	147	77	43	35	26	40	88
29	197	68	89	118	---	139	83	47	36	26	36	73
30	161	70	86	101	---	113	77	38	35	28	32	65
31	170	---	84	83	---	101	---	37	---	27	34	---
TOTAL	3732	2537	2227	3493	2845	4653	3458	2907	1723	927	1104	2444
MEAN	120	84.6	71.8	113	102	150	115	93.8	57.4	29.9	35.6	81.5
MAX	276	192	112	238	266	395	259	366	130	38	60	251
MIN	50	58	39	76	66	94	69	37	35	23	25	34
CFSM	1.43	1.01	.85	1.34	1.21	1.78	1.37	1.12	.68	.36	.42	.97
IN.	1.65	1.12	.99	1.55	1.26	2.06	1.53	1.29	.76	.41	.49	1.08

CAL YR 1976 TOTAL 47032 MEAN 129 MAX 629 MIN 32 CFSM 1.53 IN 20.80
WTR YR 1977 TOTAL 32050 MEAN 87.8 MAX 395 MIN 23 CFSM 1.04 IN 14.18

01409780 TULPEHOCKEN CREEK NEAR JENKINS, NJ

LOCATION.--Lat 39°42'51", long 74°33'58", Burlington County, Hydrologic Unit 02040301, at bridge on Maxwell-Friendship Road 0.2 mi (0.3 km) upstream from mouth, 2.3 mi (3.7 km) northwest of Jenkins, and 2.8 mi (4.5 km) east of Jemima Mount.

DRAINAGE AREA.--21.9 mi² (56.7 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1975 to current year.
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Field data and samples for laboratory analyses suppleid by New Jersey Department of Environmental Protection, Division of WAter Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
JUN										
06...	1130	39	--	18.0	4	9.1	1.0	40	70	36
28...	0940	52	4.1	18.0	6	9.2	2.0	<20	79	52
JUL										
28...	1120	20	5.1	15.5	15	7.0	1.0	20	13	38
AUG										
25...	1215	46	--	19.0	2	6.2	--	1100	240	22
SEP										
29...	0930	68	4.3	21.0	1	8.3	.7	<20	<2	186

DATE	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN									
06...	21	.24	.01	.29	.50	.79	1.0	6.2	.00
28...	11	.06	.00	.10	.19	.29	.35	6.9	.01
JUL									
28...	15	.01	.00	.04	.29	.33	.34	8.2	.00
AUG									
25...	0	.11	.00	.04	.45	.49	.60	6.1	.00
SEP									
29...	8	.09	.00	.04	.14	.18	.27	8.2	.00

01409815 WEST BRANCH WADING RIVER AT MAXWELL, NJ

LOCATION.--Lat 39°40'30", long 74°32'28", Burlington County, Hydrologic Unit 02040301, at bridge on State Highway 563, 1.8 mi (2.9 km) southwest of Jenkins, and 1.6 mi (2.6 km) southeast of Washington.

DRAINAGE AREA.--83.9 mi² (217.3 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)
OCT 05...	1330	56	5.7	16.0	3	10.6	1.0	80	130	5	.9	.6
MAR 07...	1115	50	4.4	7.5	2	9.8	--	<20	2	1	.3	.1
APR 04...	1400	50	4.2	10.0	3	9.5	<.5	<20	5	16	4.2	1.4
MAY 10...	1315	39	4.4	12.0	5	10.2	2.0	<20	>2400	4	1.1	.4
JUN 15...	1155	40	4.4	18.0	3	9.2	<.5	<20	9	6	1.9	.4

DATE	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 05...	2.7	.7	.0	8.6	7.0	5.6	41	8	1.0	.02	6.4
MAR 07...	1.9	.7	--	6.8	3.0	--	22	7	1.3	.02	4.6
APR 04...	2.8	.6	--	7.8	3.4	--	34	0	.80	.01	--
MAY 10...	2.2	.7	.0	7.1	3.7	4.8	28	0	1.1	.02	7.8
JUN 15...	2.1	.5	--	6.7	3.9	--	22	0	1.1	.01	5.0

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
OCT 05...	1330	250	50	200	0	1	20	1	0	0	0
MAY 10...	1315	--	--	150	1	--	0	0	--	--	0

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)
OCT 05...	2	0	0	0	1000	390	630	7	0	20	0
MAY 10...	0	--	2	--	--	770	--	3	--	20	--

01409815 WEST BRANCH WADING RIVER AT MAXWELL, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MA-TERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MA-TERIAL (UG/G)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MA-TERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MA-TERIAL (UG/KG)	ALDRIN IN BOTTOM MA-TERIAL (UG/KG)
OCT										
05...	<.5	.0	15	0	0	30	0	--	0	.0
MAY										
10...	.0	--	5	--	0	20	--	0	--	--

DATE	CHLOR-DANE IN BOTTOM MA-TERIAL (UG/KG)	DDD IN BOTTOM MA-TERIAL (UG/KG)	DDE IN BOTTOM MA-TERIAL (UG/KG)	DDT IN BOTTOM MA-TERIAL (UG/KG)	DI-ELDRIN IN BOTTOM MA-TERIAL (UG/KG)	ENDRIN IN BOTTOM MA-TERIAL (UG/KG)	HEPTA-CHLOR IN BOTTOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE IN BOT-TOM MA-TERIAL (UG/KG)	LINDANE IN BOTTOM MA-TERIAL (UG/KG)	TOX-APHENE IN BOTTOM MA-TERIAL (UG/KG)
OCT										
05...	0	.0	.0	.0	.0	.0	.0	.0	.0	0
MAY										
10...	--	--	--	--	--	--	--	--	--	--

01409870 OSWEGO RIVER AT ROUTE 72 NEAR BROOKVILLE, NJ

LOCATION.--Lat 39°47'19", long 74°21'30", Ocean County, Hydrologic Unit 02040301, at bridge on State Highway 72, 0.8 mi (1.3 km) upstream from Yellow Dam Branch, 2.7 mi (4.3 km) north of Warren Grove, and West of Brookville.

DRAINAGE AREA.--7.72 mi² (19.99 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
01...	0950	52	4.4	15.0	10	1.5	1.4	110	170	0	0	0
27...	0940	50	4.9	18.5	2	.7	2.2	920	240	0	0	0
JUL												
28...	0950	50	4.6	18.0	6	.8	2.0	49	180	1	0	1
AUG												
22...	0950	99	3.4	18.5	2	1.8	1.1	49	130	0	0	0
SEP												
28...	0810	101	4.0	18.5	2	4.6	.7	23	240	0	0	0

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
01...	.0	32	51	.00	.00	.10	1.3	1.4	1.4	13	.00
27...	.0	91	59	.02	.00	.35	--	--	--	12	.00
JUL											
28...	40	67	6	.01	.00	1.1	1.1	2.2	2.2	7.0	.01
AUG											
22...	.0	54	42	.01	.00	.54	.86	1.4	1.4	6.0	.00
SEP											
28...	.0	34	3	.01	.00	.01	.02	.03	.04	9.1	.00

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JUN												
27...	0940	4	0	10	0	40	8200	5	20	.0	27	100

01409875 YELLOW DAM BRANCH AT ROUTE 72 NEAR BROOKVILLE, NJ

LOCATION.--Lat 39°47'38", long 74°22'14", Ocean County, Hydrologic Unit 02040301, at bridge on State Highway 72, 1.2 mi (1.9 km) upstream from mouth, 3.0 mi (4.8 km) north of Warren Grove, and 3.4 mi (5.5 km) west of Brookville.

DRAINAGE AREA.--6.73 mi² (17.43 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
01...	1030	251	4.5	14.0	15	1.7	1.7	<2	350	0	0	0
27...	1025	283	5.3	15.0	4	.8	.8	2	49	5	0	4
JUL												
28...	1015	289	5.9	15.0	9	.8	4.5	1600	>2400	10	0	8
AUG												
22...	1015	303	3.9	19.0	1	1.2	.7	2	<2	0	0	0
SEP												
28...	0905	275	3.7	16.5	1	5.6	.6	33	49	0	0	0

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
01...	.0	137	27	.05	.00	.36	.74	1.1	1.2	8.0	.00
27...	40	174	16	.02	.00	.63	.37	1.0	1.0	6.5	.00
JUL											
28...	20	184	29	.02	.00	2.2	1.6	3.8	3.8	5.8	.05
AUG											
22...	.0	161	18	.00	.00	.17	.39	.56	.56	6.3	.00
SEP											
28...	.0	105	4	.01	.00	.01	.10	.11	.12	9.0	.00

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JUN												
27...	1025	2	0	10	0	3	1000	2	140	.0	25	60

01409960 PAPOOSE BRANCH NEAR SIM PLACE, NJ

LOCATION.--Lat 39°44'32", long 74°27'11", Burlington County, Hydrologic Unit 02040301, at bridge on Jenkins Road, 0.7 mi (1.1 km) upstream from mouth, 0.9 mi (1.4 km) southeast of Bear Swamp Hill, and 1.7 mi (2.7 km) west of Sim Place.

DRAINAGE AREA.--4.40 mi² (11.40 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
01...	1345	26	4.5	14.0	1	2.9	.0	2	34	0	0	0
27...	1335	28	4.6	15.5	1	5.2	.5	5	2	1	0	1
JUL												
28...	1310	28	4.4	15.0	1	5.3	.2	8	8	0	0	0
AUG												
22...	1250	35	4.5	16.0	0	5.8	.3	2	2	0	0	0
SEP												
28...	1015	60	4.2	16.0	5	6.0	.5	22	63	0	0	0

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
01...	.0	16	0	.00	.00	.00	.10	.10	.10	5.3	.00
27...	40	40	3	.03	.00	.01	.13	.14	.17	4.7	.00
JUL											
28...	.0	22	0	.00	.00	.00	.04	.04	.04	4.1	.00
AUG											
22...	.0	26	5	.00	.00	.00	.05	.05	.05	8.1	.00
SEP											
28...	.0	44	9	.42	.01	.05	.36	.41	.84	11	.00

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JUN												
27...	1335	3	6	<10	0	8	260	0	10	.0	35	30

01409970 OSWEGO RIVER AT OSWEGO LAKE, NJ

LOCATION.--Lat 39°43'53", long 74°29'31", Burlington County, Hydrologic Unit 02040301, at bridge on Little Hawkin Road at outlet of Oswego Lake, 0.6 mi (1.0 km) downstream from Breeches Branch, and 3.0 mi (4.8 km) northwest of Jenkins.

DRAINAGE AREA.--64.4 mi² (166.8 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1975 to current year.
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
01...	1325	38	4.4	20.5	3	6.6	.2	<2	<2	0	0	0
27...	1310	39	4.4	24.5	1	8.5	.5	<2	4	0	0	0
JUL												
28...	1230	36	4.1	23.5	5	8.1	.9	2	49	0	0	0
AUG												
22...	1205	49	4.1	22.5	1	9.0	.4	<2	7	0	0	0
SEP												
28...	1040	53	4.3	20.0	1	9.4	.4	8	23	0	0	0

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
01...	.0	15	3	.00	.00	.00	.20	.20	.20	6.4	.00
27...	.0	28	1	.00	.00	.00	.13	.13	.13	7.3	.00
JUL											
28...	.0	25	0	.00	.00	.01	.25	.26	.26	5.2	.00
AUG											
22...	.0	29	6	.00	.00	.01	.03	.04	.04	7.9	.00
SEP											
28...	.0	23	1	.01	.00	.00	.00	.00	.01	11	.00

01410000 OSWEGO RIVER AT HARRISVILLE, NJ

LOCATION.--Lat 39°39'47", long 74°31'26", Burlington County, Hydrologic Unit 02040301, and right bank 50 ft (15 m) downstream from bridge on State Highway Spur 563 at Harrisville, and 0.5 mi (0.8 km) upstream from confluence with West Branch Wading River.

DRAINAGE AREA.--64.0 mi² (165.8 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1930 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1955, published as "East Branch Wading River at Harrisville".
CHEMICAL ANALYSES: Water years 1962-63, 1976 to current year.

GAGE.--Water-stage recorder. Concrete control since June 23, 1939. Datum of gage is 4.62 ft (1.408 m) NGVD.

REMARKS.--Discharge records excellent except those for periods of no gage-height record, which are fair. Figures given herein represent flow over main spillway and through bypass channel. Flow regulated by Harrisville Pond 200 ft (61 m) above station, capacity, about 30,000,000 gal (114,000 m³) and by ponds and cranberry bogs 5 to 10 mi (8 to 16 km) upstream.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--47 years, 86.9 ft³/s (2.461 m³/s), 18.44 in/yr (468 mm/yr).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 159 ft³/s (4.50 m³/s) Mar. 23, gage height, 3.32 ft (1.012 m); minimum, 18 ft³/s (0.51 m³/s) July 24, gage height, 2.73 ft (0.832 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,390 ft³/s (39.4 m³/s) Aug. 20, 1939 (gage height, 9.54 ft or 2.908 m, from high-water mark in recorder shelter) from rating curve extended above 640 ft³/s (18.1 m³/s); no flow part of Oct. 26, 1932, June 10, 1970, and May 29, 30, 1974, while pond was filling.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	135	43	45	53	88	63	48	36	25	29	38
2	50	113	41	43	53	79	71	45	34	25	34	65
3	50	96	39	43	53	71	93	41	33	24	31	53
4	60	88	36	45	55	68	85	41	33	23	34	25
5	60	79	34	45	58	74	113	48	36	22	29	33
6	55	74	34	43	53	71	130	55	34	22	28	82
7	48	68	52	45	53	68	110	50	41	30	26	96
8	45	65	80	43	53	65	93	45	43	25	26	65
9	93	65	60	41	50	63	82	45	55	24	26	55
10	99	65	56	99	53	60	76	43	71	24	28	50
11	63	60	54	137	58	60	74	48	92	24	38	43
12	54	58	52	110	60	71	68	82	66	24	40	41
13	53	58	50	82	58	74	63	96	54	28	55	35
14	65	58	46	71	58	71	60	106	52	28	41	38
15	63	58	45	71	58	63	58	88	52	26	43	38
16	63	58	48	68	53	58	55	60	48	25	31	38
17	65	55	48	63	45	53	53	45	46	25	38	43
18	53	55	45	60	43	74	50	41	44	24	43	50
19	43	53	45	60	43	93	50	40	36	22	38	34
20	58	50	48	68	48	85	48	38	32	23	36	43
21	130	50	55	74	45	79	45	38	29	25	43	43
22	127	50	45	68	48	113	45	38	28	23	33	41
23	106	48	50	74	48	152	50	38	27	20	33	40
24	88	45	50	65	55	135	55	36	27	19	45	40
25	103	44	45	65	99	106	55	34	26	22	76	45
26	142	43	63	68	93	90	53	34	26	26	41	48
27	152	43	65	60	85	76	65	34	30	23	38	63
28	135	43	58	58	88	68	53	33	26	22	36	60
29	120	45	55	58	---	65	55	33	25	23	38	53
30	135	45	50	55	---	65	50	33	25	28	33	45
31	142	---	48	53	---	65	---	31	---	26	33	---
TOTAL	2579	1867	1540	1980	1619	2423	2021	1487	1207	750	1143	1443
MEAN	83.2	62.2	49.7	63.9	57.8	78.2	67.4	48.0	40.2	24.2	36.9	48.1
MAX	152	135	80	137	99	152	130	106	92	30	76	96
MIN	43	43	34	41	43	53	45	31	25	19	26	25
CFSM	1.30	.97	.78	1.00	.90	1.22	1.05	.75	.63	.38	.58	.75
IN.	1.50	1.09	.90	1.15	.94	1.41	1.17	.86	.70	.44	.66	.84

CAL YR 1976 TOTAL 26426 MEAN 72.2 MAX 240 MIN 25 CFSM 1.13 IN 15.36
WTR YR 1977 TOTAL 20059 MEAN 55.0 MAX 152 MIN 19 CFSM .86 IN 11.66

NOTE.--No gage-height record Nov. 14 to Dec. 14 and June 6 to July 18.

01410000 OSWEGO RIVER AT HARRISVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
FEB 01...	1010	53	48	6.4	3.0	6	14.8	2.0	<20	<2
APR 04...	1325	85	51	4.2	11.0	2	10.6	--	<20	2
MAY 10...	1200	44	42	4.3	14.0	2	9.2	2.0	<20	>2400
JUN 15...	1245	52	38	4.4	22.0	4	8.2	<.5	<20	14
JUL 28...	1030	22	41	4.4	19.0	1	10.8	--	<20	<2
AUG 25...	1020	82	53	--	21.0	1	6.5	6.0	790	>2400
SEP 29...	1100	55	54	4.3	18.5	1	10.2	--	<20	5

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
FEB 01...	5	1.0	.5	2.6	1.1	9.5	4.7	46	0	--
APR 04...	15	3.7	1.3	2.6	.9	9.9	3.7	35	0	--
MAY 10...	8	2.6	.3	1.4	.6	6.5	3.8	19	6	--
JUN 15...	5	1.3	.4	2.0	.5	6.3	3.8	21	3	--
JUL 28...	6	1.4	.6	5.5	1.3	6.5	4.0	33	6	.01
AUG 25...	8	2.5	.5	2.2	.9	8.0	3.4	24	6	.01
SEP 29...	6	1.1	.7	3.4	1.1	8.3	7.5	35	3	.01

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
FEB 01...	--	--	--	1.4	--	--	--	--	--
APR 04...	--	--	--	.80	--	--	.01	--	--
MAY 10...	--	--	--	1.1	--	--	.00	--	5.7
JUN 15...	--	--	--	1.0	--	--	.00	--	4.0
JUL 28...	.00	.02	.20	.22	--	.23	.00	.00	5.1
AUG 25...	.00	.01	.21	.22	--	.23	.01	.00	5.4
SEP 29...	.00	.02	.11	.13	180	.14	.01	.00	13

01410000 OSWEGO RIVER AT HARRISVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)
SEP 29...	1100	1	<10	30	<10	<10	420	<10	0	.0	<10	0

DATE	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
SEP 29...	0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0

01410005 BEAVER RUN AT HARRISVILLE, NJ

LOCATION.--Lat 39°39'10", long 74°30'54", Burlington County, Hydrologic Unit 02040301, at bridge on Chatsworth Road, 0.4 mi (0.6 km) upstream from mouth, approximately 0.6 mi (1.0 km) southeast of Harrisville, and 4.4 mi (7.1 km) east of Bulltown.

DRAINAGE AREA.--1.21 mi^2 (3.13 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
JUN										
06...	1345	42	--	17.0	5	8.7	1.6	20	240	38
28...	1020	46	4.1	16.0	6	8.9	1.5	<20	130	69
JUL										
27...	1430	74	4.3	16.0	30	4.4	.8	40	220	153
AUG										
25...	0925	146	--	16.0	1	9.1	--	5400	>2400	57
SEP										
29...	1300	86	3.7	14.5	2	7.2	.6	<20	130	32

DATE	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN									
06...	24	.24	.01	.28	.42	.70	.95	8.6	.00
28...	13	.03	.00	.11	.37	.48	.51	7.2	.00
JUL									
27...	28	.02	.01	.23	1.2	1.4	1.4	9.1	.06
AUG									
25...	11	.30	.00	.05	.69	.74	1.0	5.7	.00
SEP									
29...	3	.00	.00	.01	.15	.16	.16	9.0	.00

01410070 WADING RIVER AT WADING RIVER, NJ

LOCATION.--Lat 39°37'03", long 74°29'48", Burlington County, Hydrologic Unit 02040301, at bridge on State Highway 542 in Wading River, 0.5 mi (0.8 km) upstream from Ives Branch, and approximately 2.7 mi (4.3 km) northwest of New Gretna.

DRAINAGE AREA.--176 mi^2 (456 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of WAter Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
JUN										
02...	1330	186	--	20.0	2	8.4	.4	<20	33	78
28...	1410	13600	6.7	18.0	1	10.3	2.3	170	33	10500
JUL										
27...	1330	7080	6.0	21.0	3	8.0	1.2	50	4	4700
AUG										
24...	1330	3820	--	23.0	3	6.7	--	78	49	2180
SEP										
28...	1330	12700	5.7	21.0	4	--	1.4	20	11	7960

DATE	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN										
02...	1	.01	.00	.01	.02	.03	.04	4.1	--	.00
28...	9	.02	.02	.05	.24	.29	.33	8.0	.13	.00
JUL										
27...	11	.01	.00	.02	.25	.27	.28	8.0	--	.00
AUG										
24...	16	.01	.00	.00	.31	.31	.32	7.4	--	.00
SEP										
28...	13	.01	.00	.00	.27	.27	.28	8.5	--	.00

01410130 EAST BRANCH BASS RIVER AT DANS BRIDGE, NJ

LOCATION.--Lat 39°38'26", long 74°25'15", Burlington County, Hydrologic Unit 02040301, at bridge on Dans Bridge Road, 0.5 mi (0.8 km) northeast of Dans Bridge, 0.5 mi (0.8 km) upstream from Dans Bridge Branch, 6.5 mi (10.5 km) south of Sim Place.

DRAINAGE AREA.--1.07 mi² (2.77 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
01...	1150	35	4.4	13.5	2	6.5	.0	5	23			
27...	1135	36	4.6	14.5	1	6.9	.3	11	2	0 1	0 0	0 1
JUL												
28...	1135	38	4.3	14.5	0	7.4	.4	<2	27	0	0	0
AUG												
22...	1110	43	4.2	15.5	0	6.1	.3	7	23	0	0	0
SEP												
28...	1155	46	4.3	16.0	0	6.8	.3	33	33	0	0	0

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
01...	.0	22	5	.00	.00	.00	.01	.01	.01	6.3	.00
27...	40	27	1	.01	.00	.01	.28	.29	.30	5.2	.00
JUL											
28...	.0	28	0	.01	.00	.01	.00	.01	.02	4.1	.00
AUG											
22...	.0	34	2	.01	.00	.00	.06	.06	.07	6.1	.00
SEP											
28...	.0	32	0	.00	.00	.00	.00	.00	.00	9.5	.00

01410150 EAST BRANCH BASS RIVER NEAR NEW GRETNA, NJ

LOCATION.--Lat 39°37'23", long 74°26'30", Burlington County, Hydrologic Unit 02040301, at bridge on Stage Road, 0.7 mi (1.1 km) west of Lake Absegami, 2.2 mi (3.5 km) north of New Gretna, and 5.3 mi (8.5 km) upstream from mouth.

DRAINAGE AREA.--8.11 mi² (21.00 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
MAR 07...	1025	49	4.6	6.5	2	7.1	<.5	<20	2	1
APR 04...	1250	47	--	--	1	--	--	--	--	9
MAY 10...	1010	40	4.3	12.0	1	10.6	1.0	<20	350	4
JUL 27...	1000	35	5.3	14.0	1	7.0	--	70	22	5
AUG 24...	1115	48	5.1	16.0	1	6.8	2.0	2400	>2400	4
SEP 28...	1000	48	4.3	16.0	1	7.9	--	20	5	5

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
MAR 07...	.3	.1	3.0	.9	--	6.3	5.2	--	36	3
APR 04...	2.3	.8	3.5	.9	--	6.0	4.6	--	38	3
MAY 10...	.8	.5	2.6	.7	.0	5.2	4.8	5.5	27	0
JUL 27...	1.1	.6	3.4	1.9	--	5.1	6.3	--	37	11
AUG 24...	.8	.5	2.6	.7	--	5.6	5.8	--	30	4
SEP 28...	1.0	.6	3.1	1.2	--	5.0	5.6	--	31	2

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
MAR 07...	--	--	--	--	1.4	--	.02	--	9.0
APR 04...	--	--	--	--	--	--	--	--	--
MAY 10...	--	--	--	--	1.1	--	.00	--	5.9
JUL 27...	--	--	--	--	--	--	--	--	3.2
AUG 24...	.02	.00	.02	.13	.15	.17	.65	.01	6.4
SEP 28...	.02	.00	.02	.19	.21	.23	.01	.00	11

01410150 EAST BRANCH BASS RIVER NEAR NEW GRETNA, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY 10...	1010	100	0	0	0	0	0	11

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY 10...	300	4	20	.0	6	0	30	0

01410180 WEST BRANCH BASS RIVER TRIBUTARY NEAR HARRISVILLE, NJ

LOCATION.--Lat 39°40'04", long 74°26'18", Burlington County, Hydrologic Unit 02040301, at bridge on Oswego Road, 0.9 mi (1.4 km) upstream from West Branch Bass River, 3.7 mi (6.0 km) east of Harrisville, and 4.7 mi (7.6 km) south of Sim Place.

DRAINAGE AREA.--0.67 mi² (1.74 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
01...	1255	24	4.8	20.5	2	7.8	.3	2	5	1	0	1
27...	1235	26	5.1	21.0	1	5.9	.9	110	<2	2	0	2
AUG												
22...	1140	50	4.6	20.0	10	2.0	1.9	33	33	1	0	1
SEP												
28...	1115	42	4.5	17.5	1	5.4	.9	11	110	0	0	0

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
01...	30	16	1	.00	.00	.00	.19	.19	.19	5.0	.00
27...	25	37	5	1.7	.00	.03	.42	.45	2.2	5.3	.00
AUG											
22...	40	48	27	.00	.00	.00	.40	.40	.40	8.3	.00
SEP											
28...	.0	31	4	.00	.00	.00	.22	.22	.22	10	.00

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JUN												
27...	1235	4	0	<10	3	4	700	8	10	.0	8	10

01410200 WEST BRANCH BASS RIVER NEAR NEW GRETNA, NJ

LOCATION.--Lat 39°37'27", long 74°26'47", Burlington County, Hydrologic Unit 02040301, at bridge on Stage Road, 0.6 mi (1.0 km) upstream from the confluence of Bass River and East Branch Bass River, approximately 2.3 mi (3.7 km) north of New Gretna, and 2.7 mi (4.3 km) east of Wading River.

DRAINAGE AREA.--6.54 mi² (16.94 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
JUN 02...	1215	38	--	22.0	2	7.9	.9	<2	130	26
28...	1130	128	4.3	18.0	1	10.1	1.7	40	8	26
JUL 27...	1130	46	5.2	20.0	2	6.4	.6	130	79	31
AUG 24...	1145	103	5.2	23.0	1	7.1	--	790	240	37
SEP 28...	1100	59	4.1	20.0	1	10.2	.7	<20	9	32

DATE	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN 02...	0	.01	.00	.02	.22	.24	.25	4.9	.00
28...	0	.01	.00	.02	.34	.36	.37	5.3	.00
JUL 27...	7	.00	.00	.02	.24	.26	.26	8.4	.00
AUG 24...	4	.01	.00	.01	.29	.30	.31	7.0	.00
SEP 28...	2	.01	.00	.01	.30	.31	.32	9.1	.00

01410205 BASS RIVER AT NEW GRETNA, NJ

LOCATION.--Lat 39°35'37", long 74°26'35", Burlington County, Hydrologic Unit 02040301, at bridge on U.S. Route 9 in New Gretna, 0.8 mi (1.3 km) upstream from Jobs Creek, and 3.2 mi (5.1 km) southeast of Wading River.

DRAINAGE AREA.--16.8 mi² (43.5 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Deaprtment of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
JUN										
02...	1045	26100	--	19.0	4	8.6	1.4	70	>2400	18000
28...	1250	22700	6.8	21.0	1	9.1	2.8	230	46	15700
JUL										
27...	1235	18600	6.3	21.0	5	6.9	2.0	790	33	13600
AUG										
24...	1220	13900	--	23.0	1	5.6	--	330	350	9500
SEP										
28...	1230	28000	6.3	21.0	5	--	1.3	<20	920	18600

DATE	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN										
02...	56	.00	.01	.03	.25	.28	.29	4.3	--	.01
28...	21	.03	.00	.07	.17	.24	.27	6.4	.03	.01
JUL										
27...	16	.00	.01	.05	.50	.55	.56	4.9	--	.01
AUG										
24...	7	.65	.01	.01	.46	.47	1.1	7.3	--	.02
SEP										
28...	21	.01	.00	.07	.25	.32	.33	8.3	--	.01

01410500 ABSECON CREEK AT ABSECON, NJ

LOCATION.--Lat 39°25'45", long 74°31'16", Atlantic County, Hydrologic Unit 02040302, on right bank 30 ft (9.1 m) downstream from Doughty Pond Dam of Atlantic City Water Department, 1.0 mi (1.6 km) west of Absecon, and 3.4 mi (5.5 km) upstream from mouth.

DRAINAGE AREA.--16.6 mi² (43.0 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: December 1923 to April 1929 and June 1933 to December 1938 (monthly discharge only, published in WSP 1302; figures of daily discharge published in previous water-supply papers included diversions above station), May 1946 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is NGVD. Prior to May 1946, water-stage recorder and wooden control as same site at datum 0.16 ft (0.049 m) lower.

REMARKS.--Discharge records fair. Records represent flow at gage only. Diversion from Doughty Pond for municipal supply at Atlantic City (records given herein). Flow regulated by Doughty Pond, capacity, 245,000,000 gal (927,300 m³), and by Kuehule Reservoir, capacity, 250,000,000 gal (946,200 m³), 1.5 mi (2.4 km) above station.

AVERAGE DISCHARGE.--40 years (1924-28, 1933-38, 1946-77), 26.8 ft³/s (0.759 m³/s), adjusted for diversion.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 60 ft³/s (1.70 m³/s) Jan. 10; minimum daily, 3.4 ft³/s (0.10 m³/s) many days during July, August, September.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 295 ft³/s (8.35 m³/s) Sept. 6, 1935; no flow several days in many years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	18	11	13	11	13	10	9.6	4.9	3.7	3.4	3.4
2	15	11	15	12	11	13	16	10	4.9	3.7	3.4	3.7
3	14	11	6.0	11	11	9.7	32	12	5.7	3.7	3.4	3.7
4	11	11	7.2	13	12	11	19	12	4.9	3.7	3.4	3.7
5	10	13	9.1	13	10	12	27	10	4.9	3.7	3.4	3.7
6	9.7	10	9.1	13	9.6	12	30	13	5.7	3.4	3.4	3.7
7	8.5	9.7	24	14	8.8	11	19	17	6.4	3.4	3.4	3.7
8	7.9	14	36	13	7.9	12	19	17	5.7	3.4	3.4	3.7
9	29	5.3	22	12	7.2	9.7	13	11	4.9	3.4	3.4	3.7
10	27	9.1	20	59	8.5	9.7	14	18	14	3.4	3.4	3.7
11	15	8.5	17	40	7.9	9.7	15	12	12	3.4	3.4	3.7
12	10	8.5	17	18	8.5	9.7	17	8.1	4.9	3.7	3.4	3.7
13	9.7	9.7	25	14	9.1	10	15	5.7	3.7	4.9	3.4	3.7
14	13	7.9	8.5	16	7.9	14	17	4.1	3.7	5.7	3.4	3.7
15	5.3	9.1	13	17	9.1	9.7	14	4.1	4.1	4.9	3.4	3.7
16	9.1	9.7	15	14	9.1	13	15	4.1	3.7	4.1	3.4	4.1
17	7.9	9.1	16	18	8.5	9.1	14	4.1	3.7	3.4	3.4	3.7
18	9.7	12	15	14	8.5	14	14	4.9	3.7	3.4	3.4	3.7
19	5.3	10	15	13	8.5	32	14	4.1	3.7	3.4	3.4	3.7
20	14	8.5	18	12	9.1	18	13	4.1	3.7	3.4	3.4	3.7
21	56	8.5	30	11	9.7	17	14	4.1	3.7	3.4	3.4	3.7
22	29	9.7	11	11	9.7	31	14	4.1	3.7	3.4	3.4	3.7
23	15	9.7	12	10	9.1	39	14	4.1	3.7	3.4	3.4	3.7
24	13	7.9	14	13	11	24	15	4.1	3.7	3.4	3.4	3.7
25	15	7.9	15	12	30	21	14	4.9	4.1	3.4	3.4	3.7
26	35	7.9	21	12	17	13	14	4.1	3.7	4.1	3.4	3.7
27	24	9.7	18	11	15	6.5	16	4.1	3.7	3.4	3.4	3.7
28	18	11	15	12	22	13	17	4.9	3.7	3.4	3.4	4.1
29	14	21	17	13	---	16	18	4.1	4.1	3.4	3.4	4.1
30	12	15	15	12	---	16	16	4.9	3.7	3.7	3.4	3.4
31	21	---	14	12	---	19	---	5.7	---	3.4	3.4	---
TOTAL	495.1	313.4	500.9	478	306.7	467.8	499	234.0	146.7	114.2	105.4	111.6
MEAN	16.0	10.4	16.2	15.4	11.0	15.1	16.6	7.55	4.89	3.68	3.40	3.72
MAX	56	21	36	59	30	39	32	18	14	5.7	3.4	4.1
MIN	5.3	5.3	6.0	10	7.2	6.5	10	4.1	3.7	3.4	3.4	3.4
(†)	4.5	3.9	4.1	7.1	6.4	4.8	2.6	4.2	4.0	7.0	5.4	3.3

CAL YR 1976 TOTAL 4914.3 MEAN 13.4 MAX 71 MIN 3.7 † 4.8
WTR YR 1977 TOTAL 3772.8 MEAN 10.3 MAX 59 MIN 3.4 † 4.8

† Diversion, in cubic feet per second, above station from Doughty Pond for municipal supply by Atlantic City Water Company.

01410775 GREAT EGG HARBOR RIVER AT BERLIN, NJ

LOCATION.--Lat 39°47'39", long 74°56'14", Camden County, Hydrologic Unit 02040302, at bridge on Berlin-Albion Road in Berlin, 8.2 mi (13.2 km) upstream from Fourmile Branch, and 47.5 mi (76.4 km) upstream from mouth.

DRAINAGE AREA.--1.88 mi² (4.87 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 05...	0945	169	6.2	15.5	6	4.4	2.5	530	80	--	230	41
NOV 09...	0915	191	6.2	4.0	2	9.6	2.9	828	<20	848	790	40
MAR 01...	0900	290	6.5	6.5	8	7.6	3.3	838	<20	320	13	39
APR 06...	0845	222	6.3	7.5	8	5.4	3.1	8520	170	370	1600	46
MAY 25...	0920	155	6.5	22.5	2	9.2	>8.6	500	170	240	140	34
JUN 21...	0850	160	6.1	22.0	2	4.8	12	390	130	4800	1600	31
JUL 25...	0900	180	7.2	24.0	3	9.2	6.2	--	79	--	350	41
AUG 11...	0850	66	7.0	24.0	2	3.3	7.6	--	>2400	--	>2400	23

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT 05...	20	10	4.0	10	3.0	26	0	21	26	--	18	18
NOV 09...	25	9.5	3.9	14	3.4	18	0	15	18	--	21	22
MAR 01...	18	12	2.3	34	3.1	26	0	21	13	--	19	57
APR 06...	25	13	3.4	23	2.2	26	0	21	21	--	16	39
MAY 25...	17	7.9	3.5	12	3.0	21	0	17	11	.0	18	21
JUN 21...	14	6.0	3.8	12	3.0	21	0	17	27	--	16	21
JUL 25...	21	9.6	4.2	14	3.1	24	0	20	2.4	--	17	24
AUG 11...	4	6.3	1.8	3.0	1.3	23	0	19	3.7	--	7.3	4.1

DATE	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 05...	--	100	13	--	--	--	--	1.4	--	.05	--	4.2
NOV 09...	--	77	7	--	--	--	--	1.4	--	.02	--	3.1
MAR 01...	--	177	7	--	--	--	--	1.7	--	.10	--	7.4
APR 06...	--	141	13	--	--	--	--	1.1	--	.01	--	--
MAY 25...	1.5	81	33	--	--	--	--	2.5	--	.10	--	5.8
JUN 21...	--	87	27	--	--	--	--	1.4	--	.06	--	7.0
JUL 25...	--	103	33	.04	.00	.02	1.2	1.2	1.2	.13	.01	9.0
AUG 11...	--	56	11	.54	.03	.01	1.2	1.2	1.8	.07	.02	4.3

01410775 GREAT EGG HARBOR RIVER AT BERLIN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY 25...	0920	40	1	20	0	0	1	6

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY 25...	220	28	90	.0	16	0	60	0

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ

LOCATION.--Lat 39°44'02", long 74°57'05", Camden County, Hydrologic Unit 02040302, at bridge on Sicklerville- New Freedom Road (Spur 536), and 1.5 mi (2.4 km) northeast of Sicklerville.

DRAINAGE AREA.--15.1 mi² (39.1 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1971 to current year.
CHEMICAL ANALYSES: Water years 1972 to current year.
SEDIMENT ANALYSES: December 1976 and March 1977.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Selected analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (EC BROTH) (MPN)	STREP-TOCOCCI (COL-ONIES PER 100 ML)
OCT 19...	1030	140	6.3	6.5	--	7.6	10	1.8	8180	--	220
MAR 01...	1115	99	5.5	4.0	2	12.1	--	3.0	--	<20	--
JUL 14...	0945	148	5.9	21.0	1	8.3	--	3.0	--	330	--
SEP 27...	1410	73	--	19.0	10	8.6	--	1.0	--	40	--

DATE	FECAL STREP-TOCOCCI (MPN)	HARD-NESS (CA+MG) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	DIS-SOL-VED SUL-FIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
OCT 19...	--	--	--	--	--	--	--	--	--	--	--
MAR 01...	13	17	4.0	1.6	8.6	2.3	--	14	13	--	84
JUL 14...	920	28	7.2	2.4	20	2.9	--	21	14	--	100
SEP 27...	540	22	6.0	1.6	7.3	1.3	.0	16	24	.4	43

DATE	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)
OCT 19...	--	1.9	1.9	.04	.04	1.9	1.9	.69	.68	--	.32
MAR 01...	10	--	--	--	--	--	--	--	--	--	--
JUL 14...	6	1.5	--	.01	--	1.5	--	.53	--	.87	--
SEP 27...	9	.10	--	.00	--	.10	--	.04	--	1.1	--

DATE	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L)	TOTAL KJEL. NITRO-GEN IN BOTTOM MAT. (MG/KG)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOL-VED ORGANIC CARBON (C) (MG/L)
OCT 19...	--	1.0	--	--	.79	.73	.66	.66	6.3	3.8
MAR 01...	2.0	--	--	--	--	--	--	--	7.3	--
JUL 14...	1.4	--	--	2.9	.97	--	.90	--	4.0	--
SEP 27...	1.1	--	290	1.2	.03	--	.01	--	11	--

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)
SEP										
27...	1410	170	0	2	190	0	<10	<10	0	0

DATE	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)
SEP									
27...	<10	7	<10	190	640	39	<10	20	0

DATE	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)
SEP									
27...	5	<10	0	70	10	1	0	.0	0

DATE	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
SEP									
27...	13	1.0	1.4	1.1	.0	.0	.0	1.4	0

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)
OCT			
20...	1105	9.5	14
20...	1255	9.5	12
20...	1445	10.0	7
20...	1550	10.5	15
20...	1700	11.0	26
20...	1610	11.0	20
20...	1930	12.0	32
20...	2052	11.5	25
21...	1625	--	19
DEC			
02...	0945	--	1
MAR			
22...	0530	8.0	7
22...	0745	--	7
22...	0850	--	6
22...	0945	--	31
22...	1045	9.0	15
22...	1150	9.0	16
22...	1315	8.5	162
22...	1440	9.0	37
22...	1545	9.0	41
22...	1745	9.0	43
22...	2230	7.0	49
22...	2330	--	50
23...	0030	--	53
23...	0130	--	49
23...	0230	--	51
23...	0330	--	40
23...	0430	--	36
23...	0925	7.0	32
23...	1050	7.5	29
JUN			
23...	1010	17.5	10
SEP			
22...	1010	19.5	4

01410786 GREAT EGG HARBOR RIVER TRIBUTARY AT POND AT SICKLERVILLE, NJ

LOCATION.--Lat 42°31'02", long 74°57'41", Camden County, Hydrologic Unit 02040302, at pond 0.7 mi (1.1 km) northeast of Sicklerville, 0.9 mi (1.4 km) upstream from mouth, and 3.3 mi (5.3 km) west of Cedar Brook.

DRAINAGE AREA.--1.64 mi² (4.25 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: May, June and September 1977.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)
MAY 31...	1030	166	7.6	21.0	8	4.3	3.3	--	--	90	26
JUN 23...	1100	184	7.4	24.0	4	7.6	2.7	97	B55	74	26
SEP 22...	0950	142	7.0	19.5	--	5.6	3.8	B120	300	--	--

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
MAY 31...	18	11	8.6	1.5	78	64	3.1	9.8	17	153
JUN 23...	20	5.9	4.3	2.4	59	48	3.8	15	7.1	121
SEP 22...	--	--	--	--	--	--	--	--	--	--

DATE	TOTAL NONFILTRABLE RESIDUE (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
MAY 31...	7	.40	.04	.44	.08	.42	.50	.01	.00	7.5
JUN 23...	13	.56	.02	.58	.05	.29	.34	.00	.00	5.7
SEP 22...	--	.30	.01	.31	.11	.47	.58	.01	.00	--

GREAT EGG HARBOR RIVER BASIN

01410787 GREAT EGG HARBOR RIVER TRIBUTARY AT SICKLERVILLE, NJ

LOCATION.--Lat 39°43'31", long 74°57'39", Camden County, Hydrologic Unit 02040301, on left bank on upstream wingwall of bridge on Blackwood-New Brooklyn Road, 0.8 mi (1.21 km) northeast of Sicklerville, and 0.77 mi (1.24 km) upstream from mouth.

DRAINAGE AREA.--1.64 mi^2 (4.25 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1972 to current year.
CHEMICAL ANALYSES: Water years 1972 to current year.
SEDIMENT ANALYSES: Water years 1972 to current year.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: January 1972 to current year.
SUSPENDED-SEDIMENT DISCHARGE: May 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 117.21 ft (35.726 m) NGVD.

REMARKS.--Discharge records good except for those below 0.2 ft^3/s (0.006 m^3/s), which are fair. Some regulation by Winslow Crossing Water Department above station.

AVERAGE DISCHARGE.--5 years, 1.92 ft^3/s (0.054 m^3/s), 15.90 in/yr (404 mm/yr).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 30 ft^3/s (0.85 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 22	1345	34	0.96	3.09	0.942
Aug. 31	1845	*38	1.08	3.25	0.991

Minimum discharge, 0.03 ft^3/s (0.001 m^3/s) July 4, 5, 25.

EXTREMES FOR PERIOD OF RECORD.--
WATER DISCHARGE: Maximum discharge, 60 ft^3/s (1.70 m^3/s) July 13, 1975 (gage height, 4.12 ft or 1.256 m) from rating curve extended above 40 ft^3/s (1.13 m^3/s); no flow Nov. 28 to Dec. 4, 1973.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 460 mg/L June 23, 1974; minimum daily mean, 4 mg/L Dec. 6, 1975, and Feb. 14, 1976.
SEDIMENT LOADS: Maximum daily, 11 tons (10 tonnes) July 13, 1975; minimum daily, 0.00 tons (0.00 tonnes) on numerous days in Sept. 1976.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	2.4	.55	.64	.33	.85	.55	.39	.09	.05	.10	1.8
2	.87	1.4	.55	.52	.34	.78	2.0	.76	.09	.05	.10	.45
3	.87	1.2	.48	.81	.35	.76	2.4	.35	.14	.04	.11	.31
4	1.1	1.1	.45	.48	.35	.80	1.8	.32	.10	.03	.11	.20
5	.48	.94	.45	.48	.34	.86	6.1	.39	.09	.03	.14	4.7
6	.41	.68	.45	.45	.37	.82	3.0	.43	.10	.06	.11	1.9
7	.38	.62	5.4	.45	.35	.76	1.8	.43	.12	.10	.10	.62
8	.34	1.1	2.3	.48	.34	.70	1.5	.35	.09	.07	.10	.41
9	6.1	.68	1.4	.48	.33	.68	1.2	1.4	1.7	.06	.10	.27
10	1.8	.62	1.1	9.4	.33	.66	1.1	1.1	.35	.06	.11	.24
11	1.0	.55	.81	2.4	.37	.66	.94	.39	.20	.05	.20	.19
12	.55	.55	.75	1.6	.50	.70	.87	.35	.14	3.3	.17	.17
13	.62	.55	.68	1.3	1.1	.74	.81	.32	.10	.81	.16	.17
14	.41	.55	.62	1.1	.96	.86	1.2	.52	.09	.24	.81	.14
15	.34	.94	.65	.95	.84	.78	1.2	.50	.18	.17	.20	.14
16	.34	.55	.62	.70	.72	.75	.94	.47	.09	.14	.14	.14
17	.41	.52	.61	.60	.64	.62	.75	.44	.09	.13	.31	.52
18	.81	.52	.60	.52	.58	1.9	1.0	.42	.08	.11	.19	.34
19	.38	.48	.68	.46	.58	1.5	.68	.40	.08	.11	.16	.68
20	3.1	.48	1.1	.44	.57	1.2	.68	.26	.08	.11	.13	.41
21	3.2	.48	.75	.42	.57	1.0	.68	.26	.07	.11	.11	.27
22	1.1	.81	.55	.39	.60	9.4	.62	.26	.05	.10	.10	.20
23	.68	.45	.55	.37	1.5	4.6	.55	.23	.05	.08	.05	.17
24	.68	.45	.62	.36	8.0	2.4	.62	.20	.04	.05	.68	.16
25	1.4	.48	.62	.35	3.5	1.7	.70	.18	.05	.07	.45	.48
26	9.4	.45	1.1	.35	1.3	1.3	.70	.14	.05	.11	.17	.34
27	2.4	.45	1.6	.35	1.0	1.1	.70	.12	.05	.11	.13	.27
28	1.4	.45	.81	.36	.90	1.0	.70	.10	.14	.10	.11	1.5
29	1.0	1.2	.76	.42	---	1.3	.94	.09	.14	.10	.11	.94
30	.87	.62	.70	.38	---	.75	.47	.09	.07	.10	.16	.17
31	3.1	---	.66	.34	---	.68	---	.09	---	.08	6.0	---
TOTAL	47.44	22.27	28.97	28.35	27.66	42.61	37.20	11.75	4.71	6.73	11.62	16.30
MEAN	1.53	.74	.93	.91	.99	1.37	1.24	.38	.16	.22	.37	.61
MAX	9.4	2.4	5.4	9.4	8.0	9.4	6.1	1.4	1.7	3.3	6.0	4.7
MIN	.34	.45	.45	.34	.33	.62	.47	.09	.04	.03	.05	.14
CFSM	.93	.45	.57	.56	.60	.84	.76	.23	.10	.13	.23	.37
IN.	1.08	.50	.66	.64	.63	.97	.84	.27	.11	.15	.26	.41

CAL YR 1976 TOTAL 548.68 MEAN 1.50 MAX 19 MIN .13 CFSM .92 IN 12.44
WTR YR 1977 TOTAL 287.61 MEAN .79 MAX 9.4 MIN .03 CFSM .48 IN 6.52

01410787 GREAT EGG HARBOR RIVER TRIBUTARY AT SICKLERVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
OCT											
19...	0950	.39	138	6.9	10.0	--	9.0	<10	2.0	B830	800
DEC											
02...	1005	.51	154	7.1	3.5	6	12.7	--	2.1	62	--
JAN											
06...	1020	.47	146	7.6	3.5	10	15.2	--	1.9	88	82
FEB											
04...	1050	.39	215	--	3.5	5	12.1	--	2.2	48	B12
APR											
28...	0815	1.2	139	7.1	15.0	15	9.2	--	4.3	330	150
MAY											
31...	1000	.16	168	7.5	20.0	7	6.8	--	2.6	--	--
JUN											
23...	1030	.08	168	7.3	22.0	2	6.8	--	2.0	B21000	B12000
AUG											
03...	1015	.08	171	7.6	24.5	1	5.8	--	2.9	B130	1600
16...	1155	.12	174	8.2	27.0	3	8.7	--	>8.8	B750	1300
SEP											
22...	1030	.20	135	7.1	19.5	--	5.5	--	3.0	240	2500

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
OCT											
19...	--	--	--	--	--	--	--	--	--	--	--
DEC											
02...	61	21	16	5.0	3.0	1.9	48	--	39	6.1	15
JAN											
06...	56	24	15	4.6	4.0	2.3	39	--	32	1.6	16
FEB											
04...	57	22	15	4.7	16	2.1	42	--	34	--	13
APR											
28...	53	17	14	4.3	3.5	2.2	43	--	35	5.5	16
MAY											
31...	68	20	18	5.5	4.2	2.1	59	0	48	3.0	16
JUN											
23...	67	21	18	5.3	4.0	2.3	56	--	46	4.5	15
AUG											
03...	75	--	21	5.5	4.0	3.3	--	--	--	--	12
16...	69	--	19	5.3	4.0	3.2	--	--	--	--	13
SEP											
22...	--	--	--	--	--	--	--	--	--	--	--

DATE	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)
OCT											
19...	--	--	--	.50	.50	.02	.02	.52	.52	.13	.13
DEC											
02...	5.5	86	11	--	.92	--	.01	--	.93	--	.02
JAN											
06...	6.8	83	9	--	.87	--	.00	--	.87	--	.01
FEB											
04...	28	101	0	--	.42	--	.00	--	.42	--	.01
APR											
28...	5.9	74	26	--	.74	--	.02	--	.76	--	.04
MAY											
31...	7.5	102	14	--	.39	--	.04	--	.43	--	.09
JUN											
23...	7.4	88	16	--	.28	--	.01	--	.29	--	.08
AUG											
03...	3.0	108	12	--	.03	--	.01	--	.04	--	.06
16...	6.7	104	24	--	.05	--	.01	--	.06	--	.01
SEP											
22...	--	--	--	--	.25	--	.02	--	.27	--	.12

01410787 GREAT EGG HARBOR RIVER TRIBUTARY AT SICKLERVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL ORGANIC NITROGEN (N) (MG/L)	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DISSOLVED ORGANIC CARBON (C) (MG/L)
OCT 19...	.42	.27	.55	.40	1.1	.13	.10	.02	.02	4.7	3.8
DEC 02...	--	.14	--	.16	--	--	.00	--	.00	--	4.0
JAN 06...	--	.21	--	.22	--	--	.00	--	.00	--	--
FEB 04...	--	.05	--	.06	--	--	.00	--	.00	--	--
APR 28...	--	.41	--	.45	--	--	.00	--	.00	3.5	--
MAY 31...	--	1.1	--	1.2	--	--	.01	--	.00	6.6	--
JUN 23...	--	.37	--	.45	--	--	.01	--	.00	5.2	--
AUG 03...	--	.57	--	.63	--	--	.01	--	.00	4.1	--
16...	--	.45	--	.46	--	--	.03	--	.00	4.8	--
SEP 22...	--	.47	--	.59	--	--	.01	--	.00	--	--

DATE	TIME	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)
APR 28...	0815	11	.0	6	8.9	1.9	7.0

DATE	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
APR 28...	.0	.0	.0	.0	.0	0

PARTICLE SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
OCT 20...	1540	1.9	27	.14	38	62	82	93	100	94

394203074562901 WEST OUTLET NEW BROOKLYN LAKE AT WINSLOW CROSSING, NJ

LOCATION.--Lat 39°42'03", long 74°56'29", Camden County, Hydrologic Unit 02040302, at bridge at intersection of New Brooklyn Road and Malaga Road, 600 ft (183 m) west of Great Egg Harbor River at Winslow Crossing.

DRAINAGE AREA.--22.8 mi² (59.1 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1973 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA,MG) (MG/L)
OCT 19...	1205	122	6.3	8.0	--	8.6	15	1.1	400	220	--
APR 28...	1050	96	6.2	14.5	2	8.0	--	2.6	876	832	21
MAY 31...	1240	78	6.6	18.0	3	2.2	--	3.0	--	--	24
JUN 23...	1300	108	6.8	23.0	1	9.7	--	1.5	46	230	19

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT 19...	--	--	--	--	--	--	--	--	--	--	--
APR 28...	13	5.3	2.0	7.8	2.4	10	--	8	10	11	9.9
MAY 31...	8	3.7	3.7	8.0	1.5	20	0	16	8.0	5.6	11
JUN 23...	0	4.7	1.8	12	2.7	26	--	21	6.6	8.8	13

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)
OCT 19...	--	--	.99	.99	.01	.01	1.0	1.0	.06	.06	.40
APR 28...	63	7	--	1.2	--	.02	--	1.2	--	.12	--
MAY 31...	52	0	--	.04	--	.01	--	.05	--	.09	--
JUN 23...	73	4	--	1.7	--	.02	--	1.7	--	.03	--

DATE	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DISSOLVED ORGANIC CARBON (C) (MG/L)
OCT 19...	.34	.46	.40	1.5	.08	.07	.05	.05	8.6	8.5
APR 28...	.51	--	.63	--	--	.27	--	.25	5.1	--
MAY 31...	2.3	--	2.4	--	--	.12	--	.05	7.2	--
JUN 23...	.37	--	.40	--	--	.65	--	.55	6.0	--

394203074562901 WEST OUTLET NEW BROOKLYN LAKE AT WINSLOW CROSSING, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)
APR 28...	1050	0	.0	0	1.9	.4	1.6

DATE	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
APR 28...	.0	.0	.0	.0	.0	0

01410789 GREAT EGG HARBOR RIVER TRIBUTARY NO. 2 AT WINSLOW CROSSING, NJ

LOCATION.--Lat 39°42'17", long 74°57'01", Camden County, Hydrologic Unit 02040302, on Sicklerville Road, 1.2 mi (1.9 km) southeast of Winslow Crossing, and at head of storm sewer which runs into Great Egg Harbor River 0.7 mi (1.1 km) downstream.

DRAINAGE AREA.--0.52 mi² (1.35 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1973 to current year.
CHEMICAL ANALYSES: Water years 1972 to current year.
SEDIMENT ANALYSES: Water years 1973-74.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
OCT											
19...	1130	.64	221	6.9	8.5	--	9.6	<10	1.5	430	250
DEC											
02...	1125	.44	216	7.1	2.0	6	13.0	--	1.1	826	858
JAN											
06...	1120	.40	216	6.9	1.5	5	12.2	--	.6	82	616
FEB											
04...	1150	.40	225	6.7	1.0	3	12.0	--	1.6	220	814
APR											
28...	1000	.51	211	6.7	14.0	6	--	--	2.1	820	250
MAY											
31...	1215	.21	222	7.2	19.0	5	7.5	--	1.1	--	--
JUN											
23...	1205	.29	209	7.1	24.0	2	8.9	--	3.1	8140	400
AUG											
03...	1040	.17	179	6.8	24.0	2	7.2	--	2.3	1300	3200
16...	1035	.17	153	7.1	25.0	3	10.2	--	2.1	820	780
SEP											
22...	1050	.33	215	6.7	18.0	--	5.4	--	.8	450	820

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
OCT											
19...	--	--	--	--	--	--	--	--	--	--	--
DEC											
02...	84	31	17	10	5.8	1.9	64	--	53	8.1	13
JAN											
06...	77	29	15	9.6	11	2.0	59	--	48	12	8.3
FEB											
04...	77	30	16	9.0	17	1.7	57	--	47	18	4.8
APR											
28...	77	32	17	8.5	9.1	1.7	55	--	45	18	15
MAY											
31...	66	0	17	5.8	4.4	2.1	83	0	68	8.4	16
JUN											
23...	83	21	17	9.8	7.3	1.0	75	--	62	9.5	7.2
AUG											
03...	77	--	16	9.1	6.1	.6	--	--	--	--	6.0
16...	58	--	12	6.8	4.9	1.0	--	--	--	--	5.0
SEP											
22...	--	--	--	--	--	--	--	--	--	--	--

01410789 GREAT EGG HARBOR RIVER TRIBUTARY NO. 2 AT WINSLOW CROSSING, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)
OCT 19...	--	--	--	2.3	2.3	.01	.01	2.3	2.3	.06	.06
DEC 02...	14	114	13	--	2.6	--	.01	--	2.6	--	.01
JAN 06...	17	99	1	--	3.1	--	.01	--	3.1	--	.04
FEB 04...	32	134	2	--	2.9	--	.02	--	2.9	--	.06
APR 28...	17	119	13	--	1.7	--	.02	--	1.7	--	.12
MAY 31...	8.5	121	16	--	1.2	--	.06	--	1.3	--	.31
JUN 23...	16	115	11	--	.54	--	.02	--	.56	--	.10
AUG 03...	13	113	7	--	.03	--	.00	--	.03	--	.01
16...	9.7	83	23	--	.01	--	.00	--	.01	--	.01
SEP 22...	--	--	--	--	.38	--	.01	--	.39	--	.07

DATE	TOTAL ORGANIC NITROGEN (N) (MG/L)	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DISSOLVED ORGANIC CARBON (C) (MG/L)
OCT 19...	.28	.22	.34	.28	2.6	.04	.03	.02	.01	4.4	4.4
DEC 02...	--	.29	--	.30	--	--	.01	--	.01	--	2.1
JAN 06...	--	.08	--	.12	--	--	.00	--	.00	--	--
FEB 04...	--	.42	--	.48	--	--	.02	--	.01	--	--
APR 28...	--	.31	--	.43	--	--	.01	--	.01	3.2	--
MAY 31...	--	.53	--	.84	--	--	.01	--	.00	6.9	--
JUN 23...	--	.24	--	.34	--	--	.01	--	.00	7.2	--
AUG 03...	--	.29	--	.30	--	--	.00	--	.00	5.7	--
16...	--	.24	--	.25	--	--	.01	--	.00	7.0	--
SEP 22...	--	.27	--	.34	--	--	.00	--	.00	--	--

DATE	TIME	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)
APR 28...	1000	0	.0	5	8.7	3.6	3.5

DATE	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
APR 28...	.2	.0	.0	.0	.0	0

01410803 FOURMILE BRANCH AT WINSLOW CROSSING, NJ

LOCATION.--Lat 39°42'07", long 74°58'11", Camden County, Hydrologic Unit 02040302, at bridge on Andrews Road, 1.4 mi (2.2 km) northeast of Williamstown.

DRAINAGE AREA.--6.22 mi^2 (16.11 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: 1972 to current year.
CHEMICAL ANALYSES: Water years 1972 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA+MG) (MG/L)
OCT											
19...	1400	53	5.4	10.0	--	9.6	<10	1.1	170	250	--
MAY											
31...	1430	53	6.4	16.0	2	9.7	--	.6	--	--	13
JUN											
23...	1500	45	5.8	22.0	1	8.7	--	.7	72	440	12
AUG											
03...	0915	41	5.7	16.0	1	7.7	--	.9	250	1800	9
16...	0915	63	5.8	17.0	1	8.7	--	.7	460	1100	14
SEP											
22...	1215	48	5.4	14.0	--	9.0	--	--	150	800	--

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT											
19...	--	--	--	--	--	--	--	--	--	--	6.0
MAY											
31...	7	2.1	2.0	4.1	1.4	7	0	6	4.5	3.4	5.2
JUN											
23...	9	2.2	1.5	3.5	1.2	3	--	2	7.6	2.5	4.6
AUG											
03...	--	1.5	1.3	2.8	1.1	--	--	--	--	2.6	4.4
16...	--	2.2	2.1	3.5	1.2	--	--	--	--	7.4	5.3
SEP											
22...	--	--	--	--	--	--	--	--	--	--	--

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)
OCT											
19...	--	--	1.6	1.6	.01	.00	1.6	1.6	.05	.05	.17
MAY											
31...	38	1	--	1.7	--	.00	--	1.7	--	.40	--
JUN											
23...	41	5	--	3.0	--	.02	--	3.0	--	.14	--
AUG											
03...	38	2	--	1.6	--	.00	--	1.6	--	.02	--
16...	52	11	--	1.6	--	.00	--	1.6	--	.02	--
SEP											
22...	--	--	--	1.6	--	.00	--	1.6	--	.00	--

DATE	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DISSOLVED ORGANIC CARBON (C) (MG/L)
OCT										
19...	.10	.22	.15	1.8	.03	.03	.01	.01	5.0	4.9
MAY										
31...	.14	--	.54	--	--	.01	--	.00	4.9	--
JUN										
23...	.10	--	.24	--	--	.03	--	.00	5.4	--
AUG										
03...	.26	--	.28	--	--	.01	--	.00	4.7	--
16...	.17	--	.19	--	--	.02	--	.00	4.9	--
SEP										
22...	.32	--	.32	--	--	.00	--	.01	--	--

394200074565901 INFILTRATION POND AT SEWAGE TREATMENT PLANT AT WINSLOW CROSSING, NJ

LOCATION.--Lat 39°42'00", long 74°56'59", Camden County, Hydrologic Unit 02040301, in Sicklerville Sewage Treatment Plant in Winslow Crossing, 0.7 mi (1.1 km) northwest of New Brooklyn, and 2.8 mi (4.5 km) southwest of Cedar Brook.

PERIOD OF RECORD.--
CHEMICAL ANALYSES: December 1976 and February 1977.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)
DEC 02...	1415	428	7.2	3.5	7	13.4	51	0	13	4.6
FEB 04...	1320	--	7.4	1.0	4	26.0	66	0	16	6.3

DATE	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
DEC 02...	60	12	79	65	8.0	37	41	260	15
FEB 04...	85	16	93	76	5.9	51	57	329	6

DATE	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	DISSOLVED-PHOSPHORUS (P) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED ORGANIC CARBON (C) (MG/L)
DEC 02...	5.4	.01	5.4	.05	.93	.98	8.8	8.8	2.8
FEB 04...	4.9	.01	4.9	.00	.65	.65	7.5	7.6	--

01410810 FOURMILE BRANCH AT NEW BROOKLYN, NJ

LOCATION.--Lat 39°41'47", long 74°56'25", Camden County, Hydrologic Unit 02040302, on left bank 70 ft (21 m) upstream from bridge on Malaga Road, 0.3 mi (0.5 km) northeast of New Brooklyn, and 0.3 mi (0.5 km) upstream from mouth.

DRAINAGE AREA.--7.74 mi² (20.05 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1973 to current year.
CHEMICAL ANALYSES: Water years 1972 to current year.
SEDIMENT ANALYSES: Water years 1972 to current year.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: October 1972 to current year.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to March 1976.

GAGE.--Water-stage recorder. Altitude of gage is 102 ft (31.1 m), from topographic map.

REMARKS.--Discharge records good. Some regulation from sewage treatment plant upstream.

AVERAGE DISCHARGE.--5 years, 12.6 ft³/s (0.357 m³/s), 22.11 in/yr (562 mm/yr).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 42 ft³/s (1.19 m³/s) Jan. 11, gage height, 3.43 ft (1.045 m), no peak above base of 60 ft³/s (1.70 m³/s); minimum, 3.0 ft³/s (0.08 m³/s) July 24, gage height, 1.76 ft (0.536 m).

EXTREMES FOR PERIOD OF RECORD.--
WATER DISCHARGE: Maximum discharge, 128 ft³/s (3.62 m³/s) Dec. 22, 1973, gage height, 4.24 ft (1.292 m); maximum gage height, 4.41 ft (1.344 m) Feb. 3, 1973; minimum discharge, 3.0 ft³/s (0.08 m³/s) July 24, 1977, gage height, 1.76 ft (0.536 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	19	8.2	7.6	7.1	11	8.2	7.6	4.7	4.9	3.4	17
2	7.0	12	7.3	7.4	6.5	9.8	10	7.1	4.9	5.3	3.5	8.4
3	6.5	12	7.1	7.4	6.8	9.2	19	6.8	4.7	5.0	3.8	7.1
4	6.5	10	6.8	7.3	6.8	9.3	14	6.5	4.6	4.6	4.1	6.5
5	5.6	9.2	7.0	7.1	7.0	9.8	21	6.8	4.6	4.4	4.0	7.0
6	5.5	9.0	7.1	7.1	7.0	9.3	22	7.0	4.7	4.3	3.7	12
7	5.5	8.7	21	7.1	6.8	8.9	15	7.3	4.9	5.2	3.5	7.6
8	5.3	8.4	27	7.1	6.5	8.5	12	6.8	4.7	5.2	3.4	6.5
9	9.8	8.6	19	7.0	6.4	8.2	10	6.7	7.4	4.9	3.4	6.1
10	22	8.7	12	18	6.5	8.0	9.6	6.8	6.0	4.7	3.4	6.4
11	9.8	8.7	11	31	7.3	7.9	9.3	6.5	6.8	4.7	4.0	5.8
12	7.0	8.6	10	20	8.6	8.0	9.0	6.2	6.7	6.1	4.0	5.5
13	6.4	8.4	9.6	13	11	8.8	8.8	6.1	5.9	9.5	3.7	5.5
14	5.9	8.3	9.0	11	12	10	8.5	5.9	5.5	4.4	4.1	5.3
15	5.8	8.2	8.7	10	11	9.3	8.2	5.9	5.6	4.0	4.4	5.0
16	5.6	7.7	8.7	9.8	9.9	8.2	8.0	5.6	5.2	3.8	4.0	5.0
17	5.6	7.7	8.6	10	8.9	7.7	7.7	5.4	4.9	3.7	4.3	6.2
18	5.9	7.7	8.3	9.1	8.2	11	7.6	5.4	4.7	3.5	4.6	7.0
19	5.5	7.9	8.2	8.8	7.7	15	7.4	5.3	4.6	3.4	4.3	6.1
20	7.9	7.9	8.6	8.5	7.7	11	7.3	5.3	4.6	3.4	4.7	5.9
21	23	7.9	11	8.2	7.6	9.9	7.1	5.2	4.6	3.7	4.3	5.5
22	19	7.9	9.7	8.0	7.4	20	7.0	5.2	4.4	3.5	4.0	5.3
23	10	7.7	8.9	7.9	7.6	32	6.8	5.0	4.1	3.4	3.7	5.3
24	8.3	7.7	8.3	7.7	11	21	6.8	4.7	4.1	3.2	4.1	5.3
25	8.7	7.3	7.9	7.7	32	13	7.6	4.6	4.3	3.4	5.3	6.4
26	25	7.1	9.2	7.6	26	11	8.3	4.6	4.4	4.1	4.3	7.0
27	32	7.7	9.7	7.4	16	9.9	11	4.4	4.3	3.7	4.0	6.2
28	18	8.6	9.0	7.6	13	9.7	9.1	4.4	4.4	3.5	4.0	6.8
29	11	9.3	8.6	7.9	---	9.6	9.9	4.4	5.4	3.4	3.8	6.2
30	9.3	9.1	8.2	7.7	---	9.1	8.8	4.6	4.7	3.4	3.8	5.9
31	16	---	7.9	7.6	---	8.6	---	4.6	---	3.5	4.9	---
TOTAL	327.8	267.0	311.6	299.6	280.3	342.7	305.0	178.7	152.4	133.8	124.5	201.8
MEAN	10.6	8.90	10.1	9.66	10.0	11.1	10.2	5.76	5.08	4.32	4.02	6.73
MAX	32	19	27	31	32	32	22	7.6	8.0	9.5	5.3	17
MIN	5.3	7.1	6.8	7.0	6.4	7.7	6.8	4.4	4.1	3.2	3.4	5.0
CFSM	1.37	1.15	1.31	1.25	1.29	1.43	1.32	.74	.66	.56	.52	.87
IN.	1.58	1.28	1.50	1.44	1.35	1.65	1.47	.86	.73	.64	.60	.97

CAL YR 1976 TOTAL 3965.2 MEAN 10.8 MAX 48 MIN 4.6 CFSM 1.40 IN 19.06
WTR YR 1977 TOTAL 2925.2 MEAN 8.01 MAX 32 MIN 3.2 CFSM 1.04 IN 14.06

01410810 FOURMILE BRANCH AT NEW BROOKLYN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COL-ONIES PER 100 ML)
OCT 19...	1230	5.6	66	5.6	9.0	--	11.6	<10	1.1	200	110
DEC 02...	1300	7.2	61	5.9	5.0	3	12.2	--	.8	B8	B14
JAN 06...	1200	6.8	78	6.2	4.0	2	12.2	--	1.4	B20	100
FEB 04...	1240	6.7	78	5.9	5.5	2	11.5	--	1.5	B140	B4
APR 28...	1130	9.1	63	5.3	13.5	5	10.7	--	2.0	120	84
MAY 31...	1340	4.7	64	6.5	17.0	3	8.9	--	.7	--	--
JUN 23...	1330	4.4	59	6.2	22.0	1	9.0	--	.9	190	3900
AUG 03...	1140	3.8	88	6.1	19.0	1	8.4	--	2.1	240	580
16...	1040	4.1	72	6.4	19.5	2	9.4	--	1.9	270	1600
SEP 22...	1110	5.5	60	6.2	14.0	--	8.6	--	--	120	800

DATE	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
OCT 19...	--	--	--	--	--	--	--	--	--	--	--
DEC 02...	10	7	2.0	1.3	5.0	1.3	4	--	3	8.1	7.0
JAN 06...	11	6	1.9	1.5	7.0	1.8	6	--	5	6.1	7.1
FEB 04...	16	10	3.5	1.8	7.0	1.7	8	--	7	16	4.2
APR 28...	14	8	3.1	1.6	5.2	1.5	8	--	7	64	8.3
MAY 31...	14	6	3.1	1.5	6.5	1.5	10	0	8	5.1	5.9
JUN 23...	7	2	.4	1.4	6.2	1.5	6	--	5	6.1	4.5
AUG 03...	10	--	1.8	1.4	11	2.0	--	--	--	--	14
16...	13	--	2.2	1.9	6.3	1.5	--	--	--	--	8.2
SEP 22...	--	--	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)
OCT 19...	7.7	--	--	1.6	1.6	.01	.01	1.6	1.6	.07	.07
DEC 02...	6.3	26	9	--	1.6	--	.00	--	1.6	--	.05
JAN 06...	7.7	55	11	--	2.4	--	.00	--	2.4	--	.06
FEB 04...	7.5	53	4	--	2.0	--	.01	--	2.0	--	.07
APR 28...	7.4	48	8	--	1.1	--	.00	--	1.1	--	.00
MAY 31...	6.9	46	3	--	1.6	--	.01	--	1.6	--	.14
JUN 23...	6.6	54	0	--	1.7	--	.01	--	1.7	--	.10
AUG 03...	6.8	72	13	--	4.2	--	.07	--	4.3	--	.75
16...	7.4	60	8	--	.70	--	.01	--	.71	--	.06
SEP 22...	--	--	--	--	1.5	--	.01	--	1.5	--	.04

01410810 FOURMILE BRANCH AT NEW BROOKLYN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL ORGANIC NITROGEN (N) (MG/L)	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DISSOLVED ORGANIC CARBON (C) (MG/L)
OCT 19...	.21	.21	.28	.28	1.9	.17	.17	.14	--	4.7
DEC 02...	--	.16	--	.21	--	--	.07	.07	--	5.6
JAN 06...	--	.13	--	.19	--	--	.35	.35	--	--
FEB 04...	--	.19	--	.26	--	--	.39	.39	--	--
APR 28...	--	.35	--	.35	--	--	.08	.06	5.2	--
MAY 31...	--	.43	--	.57	--	--	.06	.01	5.7	--
JUN 23...	--	.19	--	.29	--	--	.07	.01	5.3	--
AUG 03...	--	.00	--	.75	--	--	.60	.60	6.1	--
16...	--	.23	--	.29	--	--	.11	.11	5.7	--
SEP 22...	--	.23	--	.27	--	--	.12	.12	--	--

DATE	TIME	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)
APR 28...	1130	0	.0	0	1.1	.0	.0

DATE	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
APR 28...	.0	.0	.0	.0	.0	0

01410820 GREAT EGG HARBOR RIVER NEAR BLUE ANCHOR, NJ

LOCATION.--Lat 39°40'09", long 74°54'49", Camden County, Hydrologic Unit 02040302, downstream side of bridge on Broad Lane Road, 2.1 mi (3.4 km) downstream from confluence of Fourmile Branch, and 1.9 mi (3.1 km) southwest of Blue Anchor.

DRAINAGE AREA.--37.3 mi² (96.6 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: June 1972 to current year.
CHEMICAL ANALYSES: Water years 1972 to current year.
SEDIMENT ANALYSES: Water years 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 88.85 ft (27.081 m) NGVD.

REMARKS.--Discharge records fair.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Selected analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--5 years, 64.1 ft³/s (1.815 m³/s), 23.34 in/yr (593 mm/yr).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 148 ft³/s (4.19 m³/s) Oct. 27, gage height, 5.09 ft (1.551 m), no peak above base of 250 ft³/s (7.08 m³/s); minimum, 11 ft³/s (0.31 m³/s) July 24, gage height, 2.60 ft (0.792 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 754 ft³/s (21.4 m³/s) July 15, 1975, gage height, 6.79 ft (2.070 m); minimum, 11 ft³/s (0.31 m³/s) July 24, 1977, gage height, 2.60 ft (0.792 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	81	36	38	36	77	51	48	20	17	12	64
2	32	76	33	38	34	68	53	42	21	17	15	45
3	32	70	30	36	34	61	72	38	20	16	15	30
4	32	63	28	36	26	56	74	34	20	15	17	26
5	28	57	28	35	34	57	79	34	19	14	16	25
6	25	52	27	34	33	56	95	36	20	14	16	56
7	24	49	53	35	33	54	89	40	21	18	14	41
8	23	47	79	34	33	51	78	41	20	19	15	32
9	37	44	81	34	31	49	69	38	26	18	13	28
10	64	43	72	61	32	47	62	38	38	16	13	29
11	63	41	62	89	35	45	56	36	33	16	17	32
12	56	40	56	89	41	44	53	33	29	18	18	27
13	47	39	51	77	50	44	50	31	25	31	18	19
14	37	38	45	64	58	52	48	29	23	25	19	17
15	31	37	41	60	60	54	47	28	23	22	22	16
16	29	36	39	56	58	50	45	26	23	19	20	18
17	28	34	38	51	52	48	43	25	22	18	21	19
18	30	34	37	48	47	52	41	24	21	16	22	20
19	28	34	36	45	44	62	40	24	20	15	20	22
20	34	33	37	44	42	61	38	24	20	14	20	21
21	70	33	48	43	41	62	37	23	19	14	18	20
22	75	32	47	42	41	70	36	23	18	13	17	26
23	71	31	44	41	41	121	35	23	17	12	16	27
24	64	31	41	40	48	123	34	22	16	12	19	25
25	58	30	38	40	98	102	38	22	16	12	25	27
26	89	30	44	40	121	81	44	22	17	17	22	30
27	138	30	47	40	105	68	52	21	16	15	20	30
28	135	31	46	39	90	62	51	21	15	15	19	32
29	105	36	44	41	---	59	54	20	20	14	18	30
30	76	39	41	40	---	56	53	20	18	13	16	29
31	72	---	41	37	---	54	---	19	---	14	20	---
TOTAL	1666	1271	1390	1447	1398	1946	1617	905	636	509	553	863
MEAN	53.7	42.4	44.8	46.7	49.9	62.8	53.9	29.2	21.2	16.4	17.8	28.8
MAX	138	81	81	89	121	123	95	48	38	31	25	64
MIN	23	30	27	34	26	44	34	19	15	12	12	16
CFSM	1.44	1.14	1.20	1.25	1.34	1.68	1.45	.78	.57	.44	.48	.77
IN.	1.66	1.27	1.39	1.44	1.39	1.94	1.61	.90	.63	.51	.55	.86

CAL YR 1976 TOTAL 19831 MEAN 54.2 MAX 266 MIN 16 CFSM 1.45 IN 19.78
WTR YR 1977 TOTAL 14201 MEAN 38.9 MAX 138 MIN 12 CFSM 1.04 IN 14.16

01410820 GREAT EGG HARBOR RIVER NEAR BLUE ANCHOR, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	STREPTOCOCCI (COLONIES PER 100 ML)
OCT												
19...	1330	36	79	6.3	8.0	--	10.4	<10	1.2	1400	--	240
DEC												
02...	1215	33	73	6.3	3.0	2	12.4	--	.9	84	--	832
MAR												
01...	1255	76	77	--	5.0	2	11.8	--	2.0	--	<20	--
APR												
28...	1325	49	71	6.1	13.0	2	9.3	--	2.0	140	--	864
MAY												
31...	1515	19	73	6.6	15.0	3	9.1	--	.7	--	--	--
JUN												
23...	1540	17	69	6.4	23.0	1	8.6	--	.9	110	--	1200
JUL												
14...	1105	25	101	6.1	22.0	1	8.4	--	1.0	--	270	--
AUG												
03...	0825	16	73	6.5	19.0	1	7.2	--	.9	380	--	2300
16...	1150	22	73	6.5	20.5	1	7.7	--	1.8	200	--	1600
SEP												
22...	1245	26	86	6.2	15.5	--	8.4	--	--	120	--	640
27...	1445	29	85	--	18.0	2	9.4	--	1.0	--	<20	--

DATE	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
OCT												
19...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
02...	--	13	6	3.0	1.4	5.9	1.6	9	--	7	7.2	8.0
MAR												
01...	33	27	--	5.7	3.2	6.3	1.9	--	--	--	--	13
APR												
28...	--	27	21	8.1	1.7	6.0	1.9	8	--	7	10	9.7
MAY												
31...	--	14	6	3.3	1.5	7.3	1.8	10	0	8	4.0	5.2
JUN												
23...	--	8	0	.8	1.5	6.7	1.6	10	--	8	6.4	4.8
JUL												
14...	>2400	18	--	4.1	1.8	8.6	2.3	--	--	--	--	12
AUG												
03...	--	15	--	3.5	1.4	7.6	1.7	--	--	--	--	6.7
16...	--	15	--	3.2	1.7	7.0	1.9	--	--	--	--	7.3
SEP												
22...	--	--	--	--	--	--	--	--	--	--	--	--
27...	7	13	--	2.5	1.6	6.9	1.3	--	--	--	--	4.3

DATE	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)
OCT											
19...	9.5	--	--	1.3	1.3	.01	.01	1.3	1.3	.05	.05
DEC											
02...	7.8	46	3	--	1.3	--	.01	--	1.3	--	.15
MAR											
01...	9.8	67	6	--	--	--	--	--	--	--	--
APR											
28...	8.2	58	13	--	.98	--	.01	--	.99	--	.04
MAY											
31...	8.8	52	0	--	1.5	--	.01	--	1.5	--	.07
JUN											
23...	7.8	55	2	--	1.1	--	.01	--	1.1	--	.04
JUL											
14...	11	65	8	.99	--	.01	--	1.0	--	.13	--
AUG											
03...	9.6	55	8	--	1.1	--	.01	--	1.1	--	.03
16...	7.5	60	6	--	1.1	--	.01	--	1.1	--	.03
SEP											
22...	--	--	--	--	1.1	--	.00	--	1.1	--	.02
27...	8.6	38	1	.10	--	.00	--	.10	--	.04	--

01410820 GREAT EGG HARBOR RIVER NEAR BLUE ANCHOR, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL ORGANIC NITROGEN (N) (MG/L)	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DISSOLVED ORGANIC CARBON (C) (MG/L)
OCT 19...	.24	.17	.29	.22	1.6	.19	.18	.17	.16	4.6	4.6
DEC 02...	--	.17	--	.32	--	--	.15	--	.13	--	3.1
MAR 01...	--	--	1.4	--	--	--	--	--	--	8.8	--
APR 28...	--	.46	--	.50	--	--	.18	--	.17	4.8	--
MAY 31...	--	.68	--	.75	--	--	.26	--	.21	8.0	--
JUN 23...	--	.17	--	.21	--	--	.21	--	.12	7.1	--
JUL 14...	.59	--	.72	--	1.7	.46	--	.39	--	7.0	--
AUG 03...	--	.26	--	.29	--	--	.21	--	.17	6.0	--
16...	--	.28	--	.31	--	--	.32	--	.25	6.0	--
SEP 22...	--	.40	--	.42	--	--	.24	--	.22	--	--
27...	.89	--	.93	--	1.0	.01	--	.00	--	8.5	--

DATE	TIME	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)
APR 28...	1325	0	.0	0	2.5	.6	.0

DATE	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
APR 28...	.0	.0	.0	.0	.0	0

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT 20...	1230	35	10.0	9	.85
20...	1515	36	10.0	379	37
20...	1730	41	10.5	14	1.5
20...	2005	49	11.5	74	9.8
21...	1245	82	12.0	19	4.2
21...	1600	82	--	21	4.6
DEC 02...	1215	33	3.0	1	.09
APR 28...	1325	49	13.0	8	1.1
MAY 31...	1515	20	15.0	6	.32
JUN 23...	1540	17	23.0	9	.42
AUG 03...	0825	16	19.0	4	.19
16...	1150	22	20.5	4	.24
SEP 22...	1245	30	15.5	4	.36

01410865 SQUANKUM BRANCH AT MALAGA ROAD NEAR WILLIAMSTOWN, NJ

LOCATION.--Lat 39°40'04", long 74°57'39", Gloucester County, Hydrologic Unit 02040302, at bridge on Malaga Road, 1.0 mi (1.6 km) upstream from Hedges Branch, and 2.0 mi (3.2 km) southeast of intersection of U.S. Route 322 with New Brooklyn Road in Williamstown.

DRAINAGE AREA.--3.02 mi² (7.82 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1974 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM .7UM-MF (COL./100 ML)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI KF AGAR (COL. PER 100 ML)
OCT										
05...	1100	401	7.0	15.5	7	1.4	>28	B1300	200	--
NOV										
09...	1015	272	6.5	8.5	7	5.6	44	B17	--	<16
MAR										
01...	1015	98	6.1	9.0	2	11.1	2.1	B38	<20	B18
APR										
06...	1010	112	6.5	11.5	2	11.2	2.1	54	33	21
MAY										
25...	1040	88	6.1	17.5	2	11.7	1.2	2000	230	B2400
JUN										
21...	0950	83	5.7	16.0	1	9.6	--	700	<200	560
JUL										
25...	0950	80	5.9	18.0	1	6.8	3.0	--	230	--
AUG										
11...	0935	63	6.7	22.0	4	3.7	4.8	--	>24000	--

DATE	FECAL STREP-TOCOCCI (MPN)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
OCT										
05...	500	28	0	5.3	3.6	48	7.4	129	0	106
NOV										
09...	--	29	0	6.3	3.2	28	5.5	63	0	52
MAR										
01...	2	24	17	5.7	2.3	6.7	2.1	9	0	7
APR										
06...	8	39	29	9.3	3.8	7.1	2.0	12	0	10
MAY										
25...	330	23	17	4.4	2.8	5.8	1.7	7	0	6
JUN										
21...	200	15	11	1.7	2.7	5.4	1.3	5	0	4
JUL										
25...	750	18	11	3.2	2.4	5.3	1.3	9	0	7
AUG										
11...	>2400	20	5	4.7	2.1	2.4	2.3	18	0	15

DATE	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOL-VED SUL-FIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)
OCT									
05...	21	.0	21	37	9.9	204	9	--	--
NOV									
09...	32	--	19	25	--	125	27	--	--
MAR									
01...	11	--	10	11	--	76	1	--	--
APR									
06...	6.1	--	12	12	--	96	3	--	--
MAY									
25...	8.9	.0	7.0	11	3.7	59	0	--	--
JUN									
21...	16	--	4.2	9.1	--	49	0	--	--
JUL									
25...	18	--	2.9	9.2	--	68	2	2.7	.01
AUG									
11...	5.7	--	9.9	2.8	--	55	6	.73	.02

01410865 SQUANKUM BRANCH AT MALAGA ROAD NEAR WILLIAMSTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 05...	--	--	16	97	--	4.9	--	25	8.0
NOV 09...	--	--	10	--	--	2.9	--	22	--
MAR 01...	.13	.27	.40	--	3.9	.01	--	1.4	--
APR 06...	--	--	1.4	--	--	.02	--	--	--
MAY 25...	--	--	1.4	--	--	.04	--	4.7	--
JUN 21...	--	--	.40	--	--	.01	--	7.2	--
JUL 25...	.05	.12	.17	--	2.9	.04	.04	4.1	--
AUG 11...	.01	.81	.82	--	1.6	.13	.08	5.0	--

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
OCT 05...	1100	130	60	70	1	1	390	1	0	<10	0
MAY 25...	1040	--	--	60	1	--	6	0	--	--	0

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)
OCT 05...	1	0	50	10	490	340	460	10	10	30	0
MAY 25...	0	--	4	--	--	30	--	6	--	50	--

DATE	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT 05...	.6	.1	5	0	0	30	10	--	26	.0
MAY 25...	.0	--	5	--	0	30	--	0	--	--

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT 05...	25	210	43	550	5.5	.0	.0	.0	.0	0
MAY 25...	--	--	--	--	--	--	--	--	--	--

01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ

LOCATION.--Lat 39°35'42", long 74°51'06", Atlantic County, Hydrologic Unit 02040302, on left bank, 25 ft (7.6 m) upstream from bridge on State Highway 54, 1.0 mi (1.6 km) south of Folsom, and 2.0 mi (3.2 km) upstream from Pennypot Stream.

DRAINAGE AREA.--56.3 mi² (145.8 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1925 to current year. Prior to October 1947, published as "Great Egg River at Folsom".
CHEMICAL ANALYSES: Water years 1961 to current year.
SEDIMENT ANALYSES: Water years 1966-75.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: September 1925 to current year.
SPECIFIC CONDUCTANCE: April 1969 to April 1975, April 1977 to September 1977.
WATER TEMPERATURES: October 1960 to April 1975, April 1977 to September 1977.
SUSPENDED-SEDIMENT DISCHARGE: December 1965 to September 1970.

REVISED DISCHARGE RECORDS.--WSP 781: Drainage area. WSP 1432: 1928(M), 1933.

GAGE.--Water-stage recorder. Concrete control since Nov. 26, 1934. Datum of gage is 53.32 ft (16.252 m) NGVD. Prior to Mar. 6, 1941, water-stage recorder at site 100 ft (30 m) downstream at same datum. Mar. 6 to Oct. 5, 1941, nonrecording gage at site 145 ft (44 m) downstream at datum 0.25 ft (0.076 m) higher.

INSTRUMENTATION.--Temperature recorder since October 1960, water-quality monitor April 1969 to April 1975, and since April 1977.

REMARKS.--Discharge records excellent.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--52 years, 86.1 ft³/s (2.438 m³/s), 20.77 in/yr (528 mm/yr).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 158 ft³/s (4.47 m³/s) Oct. 28, Mar. 25, gage height, 4.38 ft (1.335 m); minimum daily, 21 ft³/s (0.59 m³/s) July 23-25.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,440 ft³/s (40.8 m³/s) Sept. 3, 1940, gage height, 9.09 ft (2.771 m); minimum, 15 ft³/s (0.42 m³/s) Sept. 6, 1957, Aug. 28-30, 1966; minimum gage height, 3.42 ft (1.042 m) Aug. 28-30, 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	108	59	58	53	126	74	73	31	28	23	42
2	58	106	57	53	52	108	73	64	33	27	24	66
3	58	109	53	53	50	96	85	59	33	27	24	57
4	57	102	50	53	50	80	98	57	32	25	25	43
5	55	93	49	53	52	78	109	55	31	24	25	38
6	50	83	48	52	52	76	114	59	31	24	24	45
7	46	76	66	52	49	74	125	64	33	26	24	71
8	43	71	85	53	49	73	123	64	33	30	22	56
9	46	68	100	52	49	70	111	61	36	29	22	46
10	59	65	114	62	47	67	96	59	52	27	22	44
11	74	64	109	82	52	64	85	56	55	26	22	42
12	80	62	99	86	57	62	79	55	50	27	25	37
13	76	61	88	100	64	62	74	52	44	35	25	34
14	67	59	79	106	71	65	71	49	40	42	25	33
15	57	59	71	94	76	70	68	47	37	35	27	31
16	50	58	68	83	79	71	67	44	39	31	29	30
17	47	57	67	73	74	67	64	44	37	28	28	31
18	49	57	64	70	68	67	62	43	36	26	31	36
19	47	55	61	66	64	77	61	41	33	24	31	38
20	50	55	62	64	61	86	59	41	31	24	29	39
21	70	55	66	63	59	85	58	40	29	23	27	37
22	83	55	72	62	58	89	58	39	29	23	25	36
23	96	53	70	59	58	106	57	39	28	21	24	35
24	96	52	65	58	64	144	57	37	27	21	34	35
25	91	52	61	56	86	156	59	36	28	21	47	37
26	94	52	64	58	121	139	62	35	29	25	39	42
27	105	52	70	58	149	118	67	35	27	25	34	42
28	148	52	68	57	146	99	73	33	27	24	31	44
29	154	55	67	57	---	86	74	32	31	23	28	44
30	134	59	64	57	---	82	74	31	31	22	27	41
31	120	---	59	55	---	77	---	31	---	23	27	---
TOTAL	2306	2005	2175	2007	1910	2720	2337	1477	1033	816	850	1252
MEAN	74.4	66.8	70.2	64.7	68.2	87.7	77.9	47.6	34.4	26.3	27.4	41.7
MAX	154	109	114	106	149	156	125	73	55	42	47	71
MIN	43	52	48	52	47	62	57	31	27	21	22	30
CFSM	1.32	1.19	1.25	1.15	1.21	1.56	1.38	.85	.61	.47	.49	.74
IN.	1.52	1.32	1.44	1.33	1.26	1.80	1.54	.98	.68	.54	.56	.83

CAL YR 1976 TOTAL 30858 MEAN 84.3 MAX 360 MIN 31 CFSM 1.50 IN 20.39
WTR YR 1977 TOTAL 20888 MEAN 57.2 MAX 156 MIN 21 CFSM 1.02 IN 13.80

01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)
OCT										
06...	0945	50	105	5.7	14.0	5	8.5	.6	B12	8
NOV										
09...	1300	68	86	5.1	10.0	2	5.0	1.5	B4	5
MAR										
01...	1330	124	82	4.8	6.0	--	11.0	1.6	B12	<20
APR										
06...	1210	114	72	4.7	9.0	2	9.2	1.3	130	33
MAY										
26...	1250	36	106	4.7	18.5	1	8.4	.8	B11	<2
JUN										
21...	1300	31	101	4.7	18.5	1	8.0	.8	B1	<20
AUG										
01...	1200	23	106	5.0	19.5	3	7.9	.8	--	--
11...	1110	22	101	5.3	20.5	0	7.9	.4	--	<2

DATE	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
OCT										
06...	--	130	14	10	3.1	1.6	9.1	1.8	5	0
NOV										
09...	160	20	13	11	2.9	1.3	7.6	1.4	2	0
MAR										
01...	150	5	--	--	--	--	--	--	0	0
APR										
06...	100	49	18	17	4.6	1.7	6.0	1.5	1	0
MAY										
26...	B36	2	16	15	2.8	2.1	9.8	1.5	1	0
JUN										
21...	B10	7	9	8	1.1	1.5	9.8	1.4	1	0
AUG										
01...	--	--	11	9	2.4	1.3	11	1.4	2	0
11...	--	<2	12	10	2.6	1.4	11	1.9	2	0

DATE	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)
OCT										
06...	4	16	.6	10	15	8.2	68	7	--	--
NOV										
09...	2	25	--	11	13	--	61	12	--	--
MAR										
01...	0	13	--	--	--	--	--	--	--	--
APR										
06...	1	32	--	12	11	--	72	4	--	--
MAY										
26...	1	32	--	10	19	--	56	6	--	--
JUN										
21...	1	32	--	8.2	18	--	50	10	--	--
AUG										
01...	2	32	--	8.9	20	--	55	1	.88	.00
11...	2	16	--	8.9	20	--	66	4	.84	.01

01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT									
06...	--	--	1.5	52	--	.12	--	--	1.1
NOV									
09...	--	--	1.7	--	--	.08	--	10	--
MAR									
01...	--	--	1.4	--	--	.09	--	--	--
APR									
06...	--	--	1.4	--	--	.03	--	--	--
MAY									
26...	--	--	1.4	--	--	.07	--	6.5	--
JUN									
21...	--	--	1.1	--	--	.04	--	6.8	--
AUG									
01...	.16	.26	.42	--	1.3	.07	.00	6.0	--
11...	.17	.42	.59	--	1.4	.11	.00	5.7	--

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
OCT											
06...	0945	510	420	90	0	1	60	1	0	4	0

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)
OCT										
06...	8	0	180	10	540	160	180	4	8	30

DATE	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT										
06...	0	.5	.0	120	0	0	50	0	0	.0

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT										
06...	0	.0	.0	.0	.0	.0	.0	.0	.0	0

01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1							---	---	---	85	77	82
2							---	---	---	93	85	88
3							---	---	---	101	93	97
4							---	---	---	102	97	100
5							---	---	---	97	89	94
6							---	---	---	92	89	91
7							---	---	---	92	83	87
8							---	---	---	84	82	83
9							---	---	---	91	84	87
10							---	---	---	84	81	83
11							---	---	---	87	80	82
12							---	---	---	92	86	88
13							---	---	---	96	91	93
14							---	---	---	97	93	95
15							---	---	---	99	80	97
16							---	---	---	102	97	100
17							---	---	---	103	96	99
18							---	---	---	104	100	102
19							---	---	---	106	103	105
20							---	---	---	107	104	105
21							---	---	---	107	103	104
22							---	---	---	104	102	103
23							---	---	---	108	103	107
24							---	---	---	109	104	107
25							---	---	---	108	103	104
26							---	---	---	102	99	100
27							83	81	---	102	98	100
28							80	74	77	102	97	100
29							78	73	76	102	98	100
30							77	73	75	100	99	99
31							---	---	---	100	97	98
MONTH							---	---	---	109	77	96

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	98	97	98	100	95	97	108	99	105	---	---	---
2	98	94	95	101	97	98	113	101	107	---	---	---
3	98	91	94	117	98	110	104	96	101	---	---	---
4	99	95	97	116	111	113	107	99	104	---	---	---
5	98	96	97	120	107	109	115	105	113	---	---	---
6	97	95	96	109	106	107	114	110	112	---	---	---
7	95	87	91	108	102	106	111	107	109	---	---	---
8	88	84	86	103	95	96	116	106	110	---	---	---
9	91	80	84	96	93	95	117	106	112	---	---	---
10	93	70	77	98	97	98	114	106	110	---	---	---
11	80	76	79	100	98	99	113	107	110	---	---	---
12	90	79	84	101	97	100	106	99	102	---	---	---
13	91	89	90	105	84	94	103	100	101	---	---	---
14	91	89	90	98	80	89	101	96	100	---	---	---
15	89	85	88	102	97	100	103	95	99	---	---	---
16	85	81	82	---	---	---	99	94	97	---	---	---
17	82	78	80	---	---	---	107	96	100	---	---	---
18	89	82	86	---	---	---	108	90	106	---	---	---
19	93	90	91	---	---	---	93	90	92	---	---	---
20	94	91	93	---	---	---	92	89	91	82	73	---
21	98	92	95	---	---	---	115	91	105	85	75	82
22	98	95	96	---	---	---	115	111	113	78	69	73
23	99	94	97	---	---	---	110	104	106	73	72	72
24	99	97	98	---	---	---	125	83	99	76	74	75
25	99	96	97	111	102	---	163	99	128	80	70	74
26	98	96	97	120	100	107	101	98	100	74	61	65
27	99	95	97	100	91	96	102	96	101	88	69	83
28	100	97	99	100	98	99	105	100	102	90	79	86
29	105	96	101	101	97	99	105	102	103	89	84	87
30	101	95	98	107	101	103	107	103	105	93	89	92
31	---	---	---	110	105	108	106	103	105	---	---	---
MONTH	105	70	92	---	---	---	163	83	105	---	---	---
YEAR	163	61	96									

01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1							---	---	---	15.0	11.5	13.0
2							---	---	---	16.0	13.5	14.5
3							---	---	---	17.0	15.0	16.0
4							---	---	---	16.0	13.5	14.0
5							---	---	---	14.5	13.0	13.5
6							---	---	---	17.0	14.5	15.5
7							---	---	---	17.5	16.5	17.0
8							---	---	---	16.5	15.0	15.5
9							---	---	---	15.5	12.0	13.0
10							---	---	---	12.0	10.5	11.0
11							---	---	---	12.5	10.5	11.5
12							---	---	---	14.0	11.5	13.0
13							---	---	---	16.0	13.5	14.5
14							---	---	---	16.0	14.5	15.5
15							---	---	---	15.5	14.0	14.5
16							---	---	---	15.0	13.5	14.5
17							---	---	---	16.5	14.0	15.5
18							---	---	---	18.5	16.0	17.0
19							---	---	---	18.5	18.0	18.0
20							---	---	---	18.0	16.5	17.0
21							---	---	---	18.0	16.5	17.5
22							---	---	---	18.5	16.5	17.5
23							---	---	---	18.5	17.0	18.0
24							---	---	---	19.0	17.5	18.5
25							---	---	---	18.5	18.0	18.0
26							---	---	---	19.0	17.5	18.0
27							13.5	12.5	---	18.0	16.5	17.5
28							14.0	12.0	13.0	18.5	16.5	17.5
29							13.5	11.5	12.5	18.0	16.5	17.5
30							14.0	11.0	12.5	16.5	15.5	16.0
31							---	---	---	15.5	15.0	15.5
MONTH							---	---	---	19.0	10.5	15.5

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	16.0	15.0	15.5	21.0	19.5	20.5	20.5	19.0	19.5	---	---	---
2	18.5	16.0	17.0	21.0	20.0	20.5	22.5	19.5	21.0	---	---	---
3	18.5	17.5	18.0	20.5	18.5	19.5	20.5	19.5	19.5	---	---	---
4	17.5	15.5	17.0	19.5	18.5	19.0	21.5	19.0	20.0	---	---	---
5	16.5	16.0	16.0	20.5	19.0	19.5	22.0	20.0	21.0	---	---	---
6	16.0	15.0	15.5	21.0	20.0	20.5	22.5	21.0	21.5	---	---	---
7	15.5	14.5	15.0	20.5	19.0	19.5	23.0	21.5	22.0	---	---	---
8	15.0	14.0	14.5	20.0	18.5	19.0	23.5	22.0	22.5	---	---	---
9	14.5	14.5	14.5	20.5	19.5	20.0	23.0	22.0	22.5	---	---	---
10	15.0	14.5	14.5	20.5	19.5	20.0	22.0	21.0	21.5	---	---	---
11	16.0	14.5	15.0	19.0	18.5	18.5	22.0	20.0	21.5	---	---	---
12	17.0	15.5	16.0	19.5	18.0	18.5	22.5	21.5	22.0	---	---	---
13	18.0	17.0	17.5	21.5	18.5	19.5	22.0	21.5	21.5	---	---	---
14	18.0	17.0	17.5	23.0	20.5	22.0	21.5	21.0	21.5	---	---	---
15	17.5	17.5	17.5	22.5	21.0	22.0	21.5	20.5	21.0	---	---	---
16	18.0	17.0	17.5	21.0	20.0	20.5	21.5	20.0	20.5	---	---	---
17	18.5	17.5	18.0	22.0	20.5	20.5	22.0	21.0	21.5	---	---	---
18	19.5	18.0	19.0	23.0	22.0	22.5	21.5	19.5	20.5	---	---	---
19	21.0	19.5	20.0	23.0	22.0	22.5	19.5	18.0	18.5	---	---	---
20	20.5	19.0	19.5	22.5	22.0	22.0	18.5	16.5	17.5	20.0	19.5	---
21	19.5	18.5	19.0	23.0	22.0	22.0	18.0	16.5	17.5	20.0	18.0	18.5
22	18.5	17.5	18.0	22.5	22.0	22.5	19.5	18.0	18.5	18.0	16.0	16.5
23	18.5	17.0	18.0	22.5	21.5	21.5	19.5	18.5	19.0	16.0	16.0	16.0
24	18.5	17.0	18.0	22.5	19.5	20.5	20.0	18.5	19.0	16.5	16.0	16.0
25	18.0	17.5	18.0	20.5	19.5	20.0	19.5	18.5	19.0	16.5	16.5	16.5
26	19.0	18.0	18.5	20.0	19.0	19.5	18.5	17.0	18.0	17.5	16.0	16.5
27	19.5	18.5	19.0	19.0	18.0	18.5	19.0	17.0	18.0	18.0	17.0	17.5
28	20.0	18.5	19.0	18.5	17.0	18.0	20.0	18.5	19.0	18.0	17.0	17.5
29	21.0	19.0	20.0	19.0	17.5	18.0	21.5	19.5	21.0	16.5	15.5	16.5
30	21.0	19.5	20.5	18.5	18.5	18.5	21.5	20.0	21.0	15.5	14.5	15.0
31	---	---	---	19.5	18.0	19.0	21.5	20.0	21.0	---	---	---
MONTH	21.0	14.0	17.5	23.0	17.0	20.0	23.5	16.5	20.5	---	---	---
YEAR	23.5	10.5	18.0									

01411053 HOSPITALITY BRANCH AT BERRYLAND, NJ

LOCATION.--Lat 39°36'31", long 74°54'34", Gloucester County, Hydrologic Unit 02040302, at bridge on Piney Hollow Road, 0.3 mi (0.5 km) southwest of Berryland, 1.1 mi (1.8 km) upstream from White Oak Branch, and 5.9 mi (9.5 km) upstream from mouth.

DRAINAGE AREA.--20.0 mi² (51.8 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1976 to current year.
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT												
05...	1230	48	6.0	16.0	2	8.8	1.4	120	8	--	8	8
NOV												
09...	1115	55	5.4	4.0	2	11.6	1.4	82	<2	836	<20	12
MAR												
01...	1130	49	5.7	7.5	3	10.6	2.2	832	<20	82	2	12
APR												
06...	1120	52	5.7	10.0	3	10.4	2.0	38	46	61	23	34
MAY												
25...	1200	42	5.9	22.5	2	7.6	1.0	120	33	630	33	10
JUN												
21...	1050	40	5.3	22.5	1	7.1	2.6	2300	49	150	230	6
JUL												
25...	1035	40	5.7	22.0	1	7.3	1.4	--	540	--	79	8
AUG												
11...	1020	38	5.8	24.0	1	7.3	.6	--	1600	--	170	8

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT											
05...	5	1.4	1.2	2.6	1.5	4	0	3	6.4	5.4	6.8
NOV											
09...	10	2.8	1.3	3.1	1.4	2	0	2	13	9.3	5.1
MAR											
01...	10	2.1	1.7	3.0	1.5	2	0	2	6.4	7.5	5.2
APR											
06...	32	8.5	3.0	3.2	1.4	2	0	2	6.4	9.0	6.1
MAY											
25...	7	2.0	1.1	3.0	1.1	4	0	3	8.1	5.4	5.4
JUN											
21...	4	.5	1.1	2.9	.9	2	0	2	16	4.6	4.6
JUL											
25...	5	1.6	.9	2.8	.8	4	0	3	13	4.7	4.8
AUG											
11...	4	1.6	1.0	2.9	1.1	5	0	4	13	5.1	5.1

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT											
05...	28	6	--	--	--	--	1.4	--	.01	--	3.6
NOV											
09...	48	6	--	--	--	--	--	--	--	--	5.1
MAR											
01...	37	4	--	--	--	--	1.4	--	.02	--	5.6
APR											
06...	52	6	--	--	--	--	1.3	--	.03	--	--
MAY											
25...	32	0	--	--	--	--	1.4	--	.02	--	4.2
JUN											
21...	29	0	--	--	--	--	.80	--	.01	--	7.1
JUL											
25...	34	36	.08	.00	.03	.40	.43	.51	.01	.00	7.9
AUG											
11...	36	0	.08	.00	.01	.29	.30	.38	.01	.00	6.2

01411080 HOSPITALITY BRANCH AT PENNY POT, NJ

LOCATION.--Lat 39°34'11", long 74°49'17", Atlantic County, Hydrologic Unit 02040302, at bridge on U.S. Route 322 in Penny Pot, 2.5 mi (4.0 km) southeast of Folsom, and 0.1 mi (0.2 km) upstream from mouth.

DRAINAGE AREA.--54.2 mi² (140.4 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT												
05...	1345	40	5.7	16.0	2	8.2	.9	290	2	--	13	8
NOV												
09...	1215	53	5.5	10.0	1	5.0	1.1	84	5	58	8	10
MAR												
01...	1230	41	5.8	7.5	3	11.5	1.0	816	<20	838	<2	6
APR												
13...	0945	46	5.1	16.0	2	8.4	1.1	--	8	8120	14	17
MAY												
25...	1240	39	5.6	22.5	2	8.1	.7	58	49	835	8	12
JUN												
21...	1255	35	5.7	23.5	1	8.1	.9	823	14	440	23	5
AUG												
01...	1120	34	5.7	22.0	2	8.0	.8	--	26	--	5	6
11...	1135	36	5.6	24.0	1	6.1	.8	--	130	--	7	6

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT												
05...	5	1.8	.9	2.5	1.2	4	0	3	13	--	6.3	6.2
NOV												
09...	8	2.5	1.0	3.0	1.2	2	0	2	10	--	10	4.8
MAR												
01...	5	1.7	.5	2.8	1.2	1	0	1	2.5	--	6.2	4.2
APR												
13...	--	2.7	2.5	2.9	1.1	--	0	--	--	--	8.3	4.9
MAY												
25...	9	1.7	1.9	3.0	1.1	4	0	3	16	.0	5.3	5.1
JUN												
21...	2	.6	.9	2.7	.9	4	0	3	13	--	4.4	4.2
AUG												
01...	3	1.2	.7	2.8	.9	4	0	3	13	--	5.4	4.5
11...	4	1.4	.7	2.7	1.1	2	0	2	8.0	--	5.1	4.9

DATE	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT												
05...	--	26	5	--	--	--	--	1.4	--	.01	--	3.5
NOV												
09...	--	42	5	--	--	--	--	--	--	--	--	3.4
MAR												
01...	--	30	0	--	--	--	--	1.3	--	.02	--	2.5
APR												
13...	--	36	7	--	--	--	--	1.0	--	.01	--	3.5
MAY												
25...	3.9	28	1	--	--	--	--	1.4	--	.01	--	5.0
JUN												
21...	--	22	0	--	--	--	--	1.1	--	.00	--	7.1
AUG												
01...	--	31	2	.09	.00	.01	.25	.26	.35	.01	.00	4.9
11...	--	32	0	.11	.00	.03	.14	.17	.28	.01	.00	5.5

01411080 HOSPITALITY BRANCH AT PENNY POT, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY 25...	1240	50	1	10	1	0	0	1

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY 25...	270	1	60	.0	7	0	10	0

01411110 GREAT EGG HARBOR RIVER AT WEYMOUTH, NJ

LOCATION.--Lat 39°30'50", long 74°46'47", Atlantic County, Hydrologic Unit 02040302, at bridge on U.S. Route 322 in Weymouth, 0.5 mi (0.8 km) upstream from Deep Run, and 20.9 mi (33.6 km) upstream from mouth.

DRAINAGE AREA.--154 mi² (399 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT												
06...	1200	69	5.7	15.0	4	9.3	.5	78	33	--	240	9
NOV												
10...	1000	70	4.9	5.5	2	11.2	.7	812	--	56	--	13
FEB												
17...	1215	69	5.5	2.0	3	12.6	1.2	460	13	110	23	10
APR												
13...	1110	66	4.7	15.5	2	9.2	1.0	811	7	8480	22	15
MAY												
26...	1030	70	5.0	19.0	1	8.7	.7	--	13	--	5	13
JUN												
21...	1000	59	5.0	20.0	1	8.6	.7	818	33	--	110	17
AUG												
01...	1030	64	5.2	20.0	2	8.2	.5	--	33	--	11	8
11...	1215	60	5.1	23.0	1	7.8	.9	--	130	--	33	10

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT											
06...	7	1.8	1.2	5.2	1.5	2	0	2	6.4	7.4	9.7
NOV											
10...	12	2.9	1.4	5.1	1.2	1	0	1	20	11	8.4
FEB											
17...	8	2.2	1.2	5.7	1.5	2	0	2	10	9.2	9.3
APR											
13...	14	2.8	1.9	4.7	1.3	1	0	1	32	9.5	8.2
MAY											
26...	11	2.1	2.0	6.0	1.3	2	0	2	32	7.3	11
JUN											
21...	15	4.9	1.1	5.5	1.1	2	0	2	32	6.3	10
AUG											
01...	6	1.8	.9	6.0	1.1	2	0	2	20	6.5	11
11...	8	2.5	.9	5.7	1.5	2	0	2	25	6.1	9.9

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT											
06...	42	9	--	--	--	--	1.4	--	.09	--	--
NOV											
10...	34	7	--	--	--	--	1.4	--	.03	--	5.3
FEB											
17...	45	0	--	--	--	--	1.5	--	.09	--	7.6
APR											
13...	53	1	--	--	--	--	1.0	--	.02	--	3.8
MAY											
26...	56	24	--	--	--	--	1.4	--	.07	--	6.4
JUN											
21...	44	0	--	--	--	--	.80	--	.00	--	3.2
AUG											
01...	43	12	.46	.00	.03	.26	.29	.75	.06	.00	--
11...	41	0	.45	.00	.05	.26	.31	.76	.03	.01	7.1

01411140 DEEP RUN NEAR WEYMOUTH, NJ

LOCATION.--Lat 39°30'26", long 74°46'56", Atlantic County, Hydrologic Unit 02040302, at bridge on State Route 559, 0.6 mi (1.0 km) south of intersection with U.S. Route 322, 0.6 mi (1.0 km) south of Weymouth, and 0.2 mi (0.3 km) upstream from mouth.

DRAINAGE AREA.--20.0 mi² (51.8 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1976 to current year.
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 06...	1115	60	4.4	14.0	3	9.0	.7	100	49	--	240	7
NOV 10...	0915	63	4.1	6.0	1	11.0	.7	<2	--	140	--	11
FEB 17...	1110	58	4.2	1.0	2	12.8	.8	580	13	110	<2	22
APR 13...	1035	60	4.1	14.0	1	10.0	.9	84	<2	8630	27	20
MAY 26...	0935	45	4.6	17.5	2	8.6	1.7	--	49	--	23	10
JUN 21...	0925	44	4.7	18.0	2	8.4	.7	180	70	1800	350	4
AUG 01...	1000	43	4.9	19.5	2	8.4	.5	--	33	--	27	7
11...	1255	51	4.6	21.0	0	7.7	.7	--	790	--	240	8

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT 06...	7	1.6	.8	3.4	1.3	0	0	0	.0	.5	8.9	6.1
NOV 10...	11	2.9	1.0	3.3	1.0	0	0	0	.0	--	12	4.8
FEB 17...	22	5.0	2.3	2.9	1.2	0	0	0	.0	--	10	4.1
APR 13...	20	4.9	1.8	3.0	1.2	0	0	0	.0	--	11	4.7
MAY 26...	9	1.8	1.3	2.7	1.2	1	0	1	40	.0	9.3	4.1
JUN 21...	3	.4	.7	3.2	1.1	1	0	1	32	--	7.2	4.6
AUG 01...	6	1.8	.6	3.0	1.3	1	0	1	20	--	7.9	4.0
11...	7	2.0	.8	2.3	1.5	1	0	1	48	--	11	3.5

DATE	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 06...	13	41	6	--	--	--	--	1.4	--	.03	--	--
NOV 10...	--	26	6	--	--	--	--	1.1	--	.13	--	5.8
FEB 17...	--	40	1	--	--	--	--	1.7	--	.05	--	5.4
APR 13...	--	44	0	--	--	--	--	1.0	--	.04	--	5.2
MAY 26...	11	38	22	--	--	--	--	1.4	--	.09	--	7.6
JUN 21...	--	30	0	--	--	.07	.17	.24	.39	.09	--	6.3
AUG 01...	--	39	3	.13	.00	.02	.28	.30	.43	.06	.04	5.1
11...	--	39	0	.17	.00	.04	.17	.21	.38	.06	.03	5.9

01411140 DEEP RUN NEAR WEYMOUTH, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
OCT 06...	1115	180	0	180	0	40	2	0	0	0
MAY 26...	0935	--	--	120	1	30	0	0	0	0

DATE	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
OCT 06...	320	220	2	10	<.5	2	0	20	--
MAY 26...	--	220	4	50	.0	4	0	30	1

01411170 GREAT EGG HARBOR RIVER AT MAYS LANDING, NJ

LOCATION.--Lat 39°27'13", long 74°44'04", Atlantic County, Hydrologic Unit 02040302, at bridge on State Route 559, at outlet of Lake Lenape, 0.4 mi (0.6 km) west of intersection of State Route 50 with U.S. Route 40 in Mays Landing.

DRAINAGE AREA.--205 mi^2 (531 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM .7UM-MF (COL./100 ML)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREP-TOCOCCI (MPN)	HARD-NESS (CA,MG) (MG/L)
OCT 06...	1245	105	5.3	16.5	4	9.3	.7	B140	130	--	130	14
NOV 10...	1030	71	4.3	5.5	2	11.7	1.1	B8	--	B30	--	17
FEB 17...	0950	65	5.2	2.0	2	12.2	.9	B32	<2	B32	<2	10
APR 13...	1200	65	4.5	16.0	2	10.0	1.1	B22	<2	56	5	15
MAY 26...	1120	61	5.3	24.0	4	9.0	1.6	21	8	48	5	14
JUN 21...	1050	57	5.7	25.0	2	9.2	3.1	20	13	58	2	8
JUL 25...	1140	59	5.8	26.0	2	7.7	3.0	--	<20	--	130	10
AUG 15...	0945	59	5.3	22.5	5	6.7	1.0	--	240	--	240	10

DATE	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
OCT 06...	12	2.3	2.0	11	1.6	2	0	2	16	8.7	21
NOV 10...	17	3.9	1.7	4.6	1.2	0	0	0	.0	14	7.0
FEB 17...	8	2.1	1.1	5.4	1.4	2	0	2	20	8.6	9.0
APR 13...	15	2.9	1.9	4.4	1.1	0	0	0	.0	11	7.4
MAY 26...	12	2.2	2.0	5.3	1.2	2	0	2	16	8.2	9.6
JUN 21...	6	1.3	1.2	5.3	1.2	2	0	2	6.4	6.8	8.5
JUL 25...	8	2.3	1.0	5.5	1.3	2	0	2	5.1	7.0	9.6
AUG 15...	8	2.5	1.0	5.1	1.2	2	0	2	16	7.3	7.9

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 06...	67	6	--	--	--	--	1.4	--	.04	--	--
NOV 10...	60	0	--	--	--	--	1.4	--	.03	--	7.8
FEB 17...	50	0	--	--	--	--	1.7	--	.06	--	7.1
APR 13...	54	3	--	--	--	--	1.0	--	.01	--	4.7
MAY 26...	37	8	--	--	.00	.39	.39	.60	.06	--	7.1
JUN 21...	40	0	--	--	--	--	1.1	--	.05	--	6.7
JUL 25...	42	92	.00	.00	.04	.74	.78	.78	.08	.01	8.1
AUG 15...	44	11	.38	.00	.12	.15	.27	.65	.07	.03	5.7

01411196 BABCOCK CREEK NEAR MAYS LANDING, NJ

LOCATION.--Lat 39°28'08", long 74°41'34", Atlantic County, Hydrologic Unit 02040302, at bridge on U.S. Route 322, 2.2 mi (3.5 km) northeast of intersection of U.S. Route 40 with State Route 50, and 1.3 mi (2.1 km) downstream from Jack Pudding Branch.

DRAINAGE AREA.--16.3 mi² (42.2 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 06...	1330	51	4.9	14.0	2	8.1	.6	100	20	--	490	7
NOV 10...	1115	63	4.3	7.0	1	9.3	.7	--	--	88	--	11
FEB 17...	0830	68	4.8	1.0	1	11.4	.9	44	33	828	7	10
APR 13...	1245	71	4.2	14.0	1	9.4	1.0	86	<2	290	9	19
MAY 26...	1205	35	5.2	16.5	1	9.3	.9	B2500	13	120	11	9
JUN 21...	1135	32	5.0	17.0	1	7.4	.9	49	34	130	130	3
JUL 25...	1220	33	5.1	19.0	1	5.6	1.6	--	70	--	79	4
AUG 15...	1045	52	5.0	19.0	1	6.6	1.1	--	170	--	220	32

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT 06...	6	1.0	1.2	3.6	1.1	1	0	1	20	5.7	7.3
NOV 10...	11	2.2	1.3	4.0	.9	0	0	0	.0	12	6.0
FEB 17...	9	1.9	1.2	4.2	1.0	1	0	1	25	9.4	7.4
APR 13...	19	4.4	2.0	4.6	1.2	0	0	0	.0	12	7.5
MAY 26...	7	1.3	1.4	3.3	.9	2	0	2	20	5.0	5.5
JUN 21...	2	.3	.6	2.9	.7	1	0	1	16	3.2	5.0
JUL 25...	2	.7	.6	2.7	.7	2	0	2	25	3.0	5.2
AUG 15...	30	1.4	7.0	4.0	1.0	2	0	2	32	6.8	6.4

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 06...	36	4	--	--	--	--	1.4	--	.03	--	--
NOV 10...	27	20	--	--	--	--	1.4	--	.03	--	8.6
FEB 17...	50	2	--	--	--	--	1.3	--	.04	--	6.8
APR 13...	59	0	--	--	--	--	.80	--	.00	--	5.8
MAY 26...	32	8	--	--	--	--	1.4	--	.00	--	6.8
JUN 21...	20	0	--	--	--	--	.40	--	.00	--	6.7
JUL 25...	32	54	.13	.00	.10	.68	.78	.91	.04	.01	8.2
AUG 15...	44	0	.13	.00	.04	.29	.33	.46	.04	.01	5.3

01411290 TUCKAHOE RIVER NEAR ESTELL MANOR, NJ

LOCATION.--Lat 39°22'19", long 74°51'14", Atlantic County, Hydrologic Unit 02040302, at bridge on Cumberland Avenue, at Atlantic-Cumberland County boundary, and 0.8 mi (1.3 km) upstream from Sharps Branch.

DRAINAGE AREA.--8.78 mi² (22.74 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./ 100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 06...	1310	33	5.8	16.5	2	6.9	1.2	27	<2	--	240	7
NOV 18...	1130	36	5.9	6.0	1	11.4	1.4	--	2	140	2	6
MAR 01...	1110	50	4.5	6.0	2	11.4	2.1	8450	<2	40	<2	5
APR 07...	1120	55	4.2	10.5	2	11.6	.9	810	--	54	--	17
MAY 19...	1130	28	5.2	22.0	2	8.9	1.8	66	94	83300	540	7
JUN 16...	1345	31	5.2	23.0	2	9.4	2.5	140	2	850	2	19
JUL 27...	1155	32	5.8	21.0	2	6.9	3.8	--	350	--	540	5
AUG 10...	1140	31	5.3	23.5	1	4.1	4.8	--	>2400	--	1600	6

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT 06...	4	1.2	1.0	2.2	.7	4	0	3	10	5.2	5.3
NOV 18...	2	1.3	.7	2.7	.6	5	0	4	10	5.3	4.0
MAR 01...	5	1.0	.6	2.8	1.2	0	0	0	.0	9.6	3.5
APR 07...	17	3.1	2.3	2.5	.9	0	0	0	.0	9.4	4.0
MAY 19...	6	1.0	1.2	2.6	.6	1	0	1	10	3.4	4.5
JUN 16...	17	6.0	.9	2.5	.6	2	0	2	20	2.6	4.4
JUL 27...	2	1.2	.6	3.1	.7	4	0	3	10	2.9	4.6
AUG 10...	4	1.3	.7	2.5	1.0	2	0	2	16	3.0	4.1

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 06...	32	5	--	--	--	--	1.1	--	.02	--	4.7
NOV 18...	27	2	--	--	--	--	1.4	--	.01	--	2.5
MAR 01...	40	0	--	--	--	--	1.4	--	.02	--	5.8
APR 07...	40	0	--	--	--	--	1.1	--	.03	--	2.6
MAY 19...	17	12	--	--	--	--	1.1	--	.01	--	7.0
JUN 16...	26	0	--	--	--	--	1.4	--	.01	--	5.4
JUL 27...	35	9	.07	.00	.06	.00	.06	.13	.02	.00	6.2
AUG 10...	33	12	.10	.01	.08	.67	.75	.86	.05	.01	5.3

01411300 TUCKAHOE RIVER AT HEAD OF RIVER, NJ

LOCATION.--Lat 39°18'25", long 74°49'15", Cape May County, Hydrologic Unit 02040302, on right bank at highway bridge on State Route 49, 0.2 mi (0.3 km) upstream from McNeals Branch, 0.4 mi (0.6 km) southeast of Head of River, and 3.7 mi (6.0 km) west of Tuckahoe.

DRAINAGE AREA.--30.8 mi² (79.8 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: December 1969 to current year.
CHEMICAL ANALYSES: Water years 1975 to current year.

GAGE.--Water-stage recorder and wooden control. Datum of gage is NGVD.

REMARKS.--Discharge records good. Occasional regulation by ponds above station.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--7 years, 43.5 ft³/s (1.232 m³/s), 19.18 in/yr (487 mm/yr).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 111 ft³/s (3.14 m³/s) Feb. 25, elevation, 4.63 ft (1.411 m); minimum daily, 10 ft³/s (0.28 m³/s) June 23, 24.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 315 ft³/s (8.92 m³/s) Aug. 28, 1971, elevation, 5.83 ft (1.777 m); minimum daily, 7.3 ft³/s (0.21 m³/s) Aug. 7, 1976.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	43	21	19	19	50	24	22	16	13	13	14
2	28	35	19	20	19	41	27	21	16	14	14	13
3	24	26	19	19	19	36	43	22	15	13	15	13
4	25	25	18	20	19	33	38	21	14	13	18	13
5	21	24	18	20	19	33	49	24	13	12	17	13
6	18	22	18	19	19	32	65	29	15	12	15	13
7	17	21	28	20	20	30	52	31	17	14	14	15
8	17	21	46	18	21	27	40	26	16	15	13	16
9	21	21	37	18	19	26	33	23	18	14	13	15
10	23	20	28	44	18	25	30	22	26	13	15	17
11	19	20	26	51	19	25	29	22	21	13	16	15
12	17	19	25	54	21	25	27	21	19	14	15	14
13	17	19	25	50	24	25	26	20	18	18	14	14
14	17	19	22	48	24	26	25	20	17	17	15	13
15	16	19	21	34	23	25	24	19	16	16	17	13
16	16	20	22	27	22	23	22	19	16	15	16	13
17	17	19	23	26	21	21	21	19	15	14	16	14
18	18	19	21	25	20	33	22	18	14	14	18	14
19	17	19	21	24	19	53	22	18	13	14	17	13
20	21	18	21	23	19	43	22	18	13	14	16	13
21	63	18	27	22	20	35	22	18	12	14	15	13
22	67	18	25	22	22	48	21	18	11	13	14	13
23	39	18	23	22	25	76	21	18	10	12	14	13
24	26	18	22	21	28	60	22	17	10	12	16	14
25	27	18	21	21	94	43	22	17	11	12	28	15
26	48	18	25	20	94	31	23	17	13	14	21	16
27	58	18	26	20	60	29	24	17	12	13	17	15
28	43	18	25	20	57	27	24	16	11	13	16	17
29	31	24	25	21	---	27	24	16	12	13	15	17
30	26	24	22	20	---	26	24	16	14	13	14	15
31	35	---	21	19	---	24	---	16	---	13	14	---
TOTAL	862	641	741	807	804	1058	868	621	444	424	491	426
MEAN	27.8	21.4	23.9	26.0	28.7	34.1	28.9	20.0	14.8	13.7	15.8	14.2
MAX	67	43	46	54	94	76	65	31	26	18	28	17
MIN	16	18	18	18	18	21	21	16	10	12	13	13
CFSM	.90	.70	.78	.84	.93	1.11	.94	.65	.48	.45	.51	.46
IN.	1.04	.77	.89	.97	.97	1.28	1.05	.75	.54	.51	.59	.51

CAL YR 1976 TOTAL 12826.5 MEAN 35.0 MAX 190 MIN 7.3 CFSM 1.14 IN 15.49
WTR YR 1977 TOTAL 8187.0 MEAN 22.4 MAX 94 MIN 10 CFSM .73 IN 9.89

01411300 TUCKAHOE RIVER AT HEAD OF RIVER, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./ 100 ML)	FECAL COLIFORM (EC BROTH) (MPN)
CT										
06...	1355	19	46	4.8	16.0	3	7.5	1.5	68	5
NOV										
18...	1215	19	39	6.1	5.5	1	10.8	.9	290	<2
MAR										
01...	0930	51	58	4.5	4.0	2	10.0	1.3	834	<2
APR										
07...	1210	52	57	4.3	10.0	1	11.4	.6	87	--
MAY										
19...	1220	20	30	5.2	19.5	2	8.5	.8	110	110
JUN										
16...	1455	17	31	5.2	20.0	1	9.2	.8	80	17
JUL										
27...	1250	13	34	5.3	19.0	1	7.1	2.7	--	350
AUG										
10...	1220	16	30	5.3	22.5	1	5.6	1.9	--	350

DATE	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
OCT									
06...	--	230	6	5	1.0	.9	2.7	1.0	1
NOV									
18...	120	<20	6	3	1.4	.7	2.7	.6	4
MAR									
01...	110	<2	12	12	3.1	1.1	3.0	1.3	0
APR									
07...	51	--	11	11	1.7	1.7	2.8	.8	0
MAY									
19...	33	1600	8	6	1.5	1.1	2.7	.7	2
JUN									
16...	380	<2	8	6	2.3	.6	2.5	.6	2
JUL									
27...	--	11	5	1	1.2	.6	2.5	.7	5
AUG									
10...	--	350	6	0	1.3	.6	2.4	1.0	12

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT									
06...	0	1	25	.7	7.0	5.1	10	41	2
NOV									
18...	0	3	5.1	--	6.8	4.4	--	20	4
MAR									
01...	0	0	.0	--	10	4.9	--	42	0
APR									
07...	0	0	.0	--	8.6	4.7	--	40	0
MAY									
19...	0	2	20	.0	30	23	6.6	21	13
JUN									
16...	0	2	20	--	3.7	4.2	--	24	0
JUL									
27...	0	4	40	--	4.0	4.4	--	33	7
AUG									
10...	0	10	96	--	3.6	4.0	--	31	20

01411300 TUCKAHOE RIVER AT HEAD OF RIVER, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 06...	--	--	--	--	.80	--	.01	--	3.7
NOV 18...	--	--	--	--	1.1	--	.01	--	2.6
MAR 01...	--	--	--	--	1.4	--	.02	--	5.4
APR 07...	--	--	--	--	1.4	--	.13	--	7.6
MAY 19...	--	--	--	--	1.1	--	.01	--	4.6
JUN 16...	--	--	--	--	1.1	--	.01	--	4.9
JUL 27...	.01	.00	.02	.86	.88	.89	.01	.00	6.5
AUG 10...	.07	.00	.04	.68	.72	.79	.04	.01	4.0

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
OCT 06...	1355	150	0	150	0	20	2	0	1	0
MAY 19...	1220	--	--	60	7	30	0	0	0	0

DATE	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
OCT 06...	310	270	30	10	<.5	2	0	40	--
MAY 19...	--	280	4	20	.0	4	0	10	4

01410570 BEACH THOROFARE AT ATLANTIC CITY, NJ

LOCATION.--Lat 39°21'56", long 74°26'44", Atlantic County, Hydrologic Unit 02040302, on south end of center support cribbing of Pennsylvania-Reading Seashore Line railroad swivel bridge, in Atlantic City, 0.5 mi (0.8 km) northeast of Bader Field Airport and 2.7 mi (4.3 km) northeast of Ventnor City.

PERIOD OF RECORD.--
TIDE ELEVATIONS: October 1976 to September 1976. Miscellaneous observations 1975 through 1976.

GAGE.--Water-stage recorder. Datum of gage is -13.86 ft (-4.225 m) NGVD. Gage-height record converted to elevation above or below (-) NGVD for publication.

REMARKS.--Records fair.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 5.27 ft (1.606 m) Sept. 25; minimum, -4.0 ft (-1.22 m) Feb. 22.

Summaries of tide elevations during year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	4.0	3.34	3.47	--	2.6	2.5	3.66	2.5	2.66	3.73	--	5.27
high tide	Date	1	20	20	--	12	5	5	5	2	30	--	25
Minimum	Elevation	-3.2	-3.26	-3.16	--	-4.0	--	-3.03	-2.69	-2.19	-2.00	--	-2.50
low tide	Date	23	23	22	--	22	--	7	3	4	28	--	14
Mean high tide		2.6	2.1	1.82	--	--	--	2.14	2.5	2.7	--	--	3.33
Mean water level		0.8	0.2	0.05	--	--	--	0.16	0.6	0.8	--	--	1.36
Mean low tide		-1.2	-1.8	-2.08	--	--	--	-1.74	-1.5	-1.3	--	--	-0.79

NOTE.--Missing or doubtful record on Oct. 7 to Nov. 4, Jan. 11 to Apr. 1 and July 6-15 and Aug. 16 to Sept. 1.

01411350 LUDLAM THOROFARE AT SEA ISLE CITY, NJ

LOCATION.--Lat 39°09'24", long 74°42'00", Cape May County, Hydrologic Unit 02040302, on bulkhead at west end of 44th Street in Sea Isle City.

PERIOD OF RECORD.--
TIDE ELEVATIONS: May 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is -13.14 ft (-4.005 m) NGVD. Gage-height record converted to elevation above or below (-) NGVD for publication.

REMARKS.--Records poor. Summaries for months with short periods of no gage-height record have been estimated with negligible or no loss of accuracy. Some periods cannot be estimated and are noted by dashed (--) lines.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 5.06 ft (1.542 m) Sept. 25; minimum, -3.07 ft (-0.936 m) Nov. 18.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 5.06 ft (1.542 m) Sept. 25, 1977; minimum, -3.07 ft (-0.936 m) Nov. 18, 1976.

Summaries of tide elevations during year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	4.26	4.43	3.53	--	3.64	--	--	--	4.30	3.84	3.59	5.06
high tide	Date	1	8	20	--	5	--	--	--	1	1	25	25
Minimum	Elevation	-2.47	-3.07	--	--	-2.99	--	--	--	-2.23	-2.33	-2.35	-2.58
low tide	Date	24	18	--	--	6	--	--	--	5	1	29	14
Mean high tide		2.85	--	--	--	2.25	--	--	--	3.00	2.76	2.83	3.23
Mean water level		1.30	--	--	--	0.40	--	--	--	0.95	0.72	0.79	1.32
Mean low tide		-0.65	--	--	--	-1.53	--	--	--	-1.23	-1.46	-1.39	-0.81

NOTE.--No gage-height record Nov. 1-8, Dec. 23 to Jan. 11, Jan. 17 to Feb. 4 and Mar. 1 to June 3.

01411353 TOWNSEND CHANNEL AT TOWNSENDS INLET, NJ

LOCATION.--Lat 39°07'44", long 74°42'53", Cape May County, Hydrologic Unit 02040302, on bulkhead at west end of 82d Street, 50 ft (15 m) south of U.S. Coast Guard Station pier, 0.6 mi (1.0 km) south of Ludlam Thorofare, 2.0 mi (3.2 km) south of Sea Isle City.

PERIOD OF RECORD.--
TIDE ELEVATIONS: October 1976 to September 1977.

GAGE.--Water-stage recorder. Datum of gage is -15.79 ft (-4.813 m) NGVD. Gage-height record converted to elevation above or below (-) NGVD for publication.

REMARKS.--Records good.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 5.03 ft (1.533 m) Sept. 25; minimum, -3.92 ft (-1.195 m) Dec. 22.

Summaries of tide elevations during year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	4.33	3.74	3.84	4.32	3.38	3.49	4.15	4.21	4.11	--	4.57	5.03
high tide	Date	26	20	20	10	20	4	4	29	2	--	25	25
Minimum	Elevation	-3.51	-3.56	-3.92	-3.70	-3.64	-3.13	-3.21	-2.70	-2.30	--	-1.32	-2.51
low tide	Date	22	23	22	18	6	23	7	3	5	--	29	14
Mean high tide		2.71	2.42	2.12	1.70	--	2.41	2.48	2.71	2.81	--	--	3.23
Mean water level		0.71	0.40	0.14	-0.11	--	0.31	0.41	0.71	0.81	--	--	1.29
Mean low tide		-1.29	-1.70	-1.92	-2.03	--	-1.79	-1.68	-1.39	-1.29	--	--	-0.73

NOTE.--Missing or doubtful gage-height record on Oct. 1-6, Feb. 3-12, July 9 to Aug. 2 and Aug. 11-19.

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in New Jersey made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1977

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
		Hackensack River basin				
01378410	Dwars Kill at Norwood, NJ	Lat 40°59'01", long 73°57'35", Bergen County, at bridge on Blanche Avenue at Norwood, 0.2 mi (0.3 km) upstream from mouth.	4.23 (10.96 km^2)	1973-77	4-20-77 8-30-77	4.2 .44
01378430	Tenakill Brook tributary at Norwood, NJ	Lat 40°59'06", long 73°57'39", Bergen County, at Blanche Avenue at Norwood, 1.0 mi (1.6 km) east of Harrington Park, 1.5 mi (2.4 km) upstream from Oradell Reservoir.	2.03 (5.26 km^2)	1973-77	4-20-77 8-30-77	1.1 .41
		Passaic River basin				
01382870	Belcher Creek at Stowaway Road at West Milford, NJ	Lat 41°07'27", long 74°22'48", Passaic County, at bridge on Stowaway Road in West Milford, at entrance to Pinecliff Lake, 2.8 mi (4.5 km) upstream from mouth.	2.44 (6.32 km^2)	1973-77	4-21-77	5.1
01382880	Belcher Creek tributary at West Milford, NJ	Lat 41°08'06", long 74°22'34", Passaic County, at bridge on Bearfort Road in West Milford, 150 ft (46 m) upstream from mouth, 3.9 mi (6.3 km) west of Hewitt.	0.61 (1.58 km^2)	1973-77	4-21-77 8-29-77	.49 0
01382890	Belcher Creek at West Milford, NJ	Lat 41°08'15", long 74°22'04", Passaic County, at bridge on Union Valley Road, 150 ft (46 m) downstream from Pinecliff Lake Dam, 0.4 mi (0.6 km) from West Milford, 1.6 mi (2.6 km) from mouth.	7.27 (18.83 km^2)	1973-77	4-21-77 8-29-77	7.9 2.6
01382910	Morsetown Brook at West Milford, NJ	Lat 41°08'13", long 74°21'18", Passaic County, at bridge on Lincoln Avenue, 0.4 mi (0.6 km) upstream from mouth, 0.9 mi (1.4 km) northeast of West Milford.	1.31 (3.39 km^2)	1973-77	4-22-77 8-29-77	.71 .03
01382960	Green Brook near West Milford, NJ	Lat 41°09'09", long 74°21'34", Passaic County, at bridge on Union Valley Road, 0.4 mi (0.6 km) upstream from mouth, 1.6 mi (2.6 km) north of West Milford.	1.47 (3.81 km^2)	1973-77	4-22-77 8-29-77	3.7 .06
01382990	Cooley Brook near West Milford, N.J.	Lat 41°09'16", long 74°21'27", Passaic County, at bridge on Union Valley Road, 0.1 mi (0.2 km) upstream from mouth, 1.8 mi (2.9 km) north of West Milford.	1.34 (3.47 km^2)	1973-77	4-22-77 8-29-77	1.8 .09

Discharge measurements made at low-flow partial-record stations during water year 1977--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
		Passaic River basin--Continued				
01387980	Haycock Brook at Pompton Lakes, NJ	Lat 40°59'40", long 74°16'28", Passaic County, at bridge on U.S. Route 202 at Pompton Lakes, 150 ft (46 m) upstream from mouth.	4.18 (10.83 km^2)	1963-64, 1973-77	4-21-76 8-30-77	2.6 1.1
*01390450	Saddle River at Upper Saddle River, NJ	Lat 41°03'32", long 74°05'44", Bergen County, 1.3 mi (2.1 km) downstream from Pine Brook and 1.7 mi (2.7 km) downstream from New York-New Jersey State line.	10.7 (27.7 km^2)	1964-72, 1975-77	9-30-77	5.0
		Raritan River basin				
01396070	South Branch Raritan River tributary No. 6 at Budd Lake, NJ	Lat 40°52'20", long 74°44'18", Morris County, at bridge on Shore Road, 300 ft (90 m) upstream from mouth, 0.6 mi (1.0 km) north of community of Budd Lake.	0.70 (1.81 km^2)	1973-77	4-22-77 8-30-77	1.8 .21
01396080	South Branch Raritan River tributary No. 7 at Budd Lake, NJ	Lat 40°52'06", long 74°44'22", Morris County, at bridge on U.S. Route 46, 300 ft (90 m) upstream from mouth, 0.3 mi (0.5 km) north of community of Budd Lake.	0.21 (0.54 km^2)	1973-77	4-22-77 8-30-77	.04 .02
01396090	South Branch Raritan River at outlet of Budd Lake, NJ	Lat 40°51'38", long 74°45'38", Morris County, at bridge on Smithtown Road, 200 ft (60 m) northwest of U.S. Route 46, and 0.5 mi (0.8 km) downstream from Budd Lake dam.	5.03 (13.03 km^2)	1964, 1973-77	8-30-77	1.1
01396590	Spruce Run near High Bridge, NJ	Lat 40°40'26", long 74°55'04", Hunterdon County, at bridge on Van Syckels Corner Road, at inlet to Spruce Run Reservoir, 1.3 mi (2.1 km) northwest of High Bridge.	13.1 (33.9 km^2)	1973-77	4-21-77 8-29-76	25 5.0
01396660	Mulhockaway Creek at Van Syckel, NJ	Lat 40°38'51", long 74°58'09", Hunterdon County, at bridge on Jutland Road, 0.2 mi (0.3 km) south of Van Syckel, 2.7 mi (4.3 km) upstream from mouth.	11.8 (30.6 km^2)	1973-77	4-21-76 7-29-77 8-29-77	16 2.8 2.8
01396670	Mulhockaway Creek tributary at Van Syckel, NJ	Lat 40°39'05", long 74°58'13", Hunterdon County, at bridge on secondary road at Van Syckel, 0.4 mi (0.6 km) upstream from mouth.	2.76 (7.15 km^2)	1973-77	4-21-77 8-29-77	4.3 .73
01404300	Lawrence Brook at outlet of Davidsons Mill Pond, NJ	Lat 40°24'46", long 74°29'58", Middlesex County, at bridge on Riva Avenue, at outlet of Davidsons Mill Pond, 0.6 mi (1.0 km) upstream from Oakeys Brook.	12.2 (31.6 km^2)	1973-77	4-20-77 8-29-77	7.0 4.0
01404400	Oakeys Brook near Patricks Corner, NJ	Lat 40°25'05", long 74°29'56", Middlesex County, at bridge on Davidsons Mill Road, 0.5 mi (0.8 km) upstream from mouth, 1.2 mi (1.9 km) east of Patricks Corner.	4.75 (12.30 km^2)	1973-77	4-20-77 8-29-77	2.2 .76
01404470	Ireland Brook at Patricks Corner, NJ	Lat 40°25'13", long 74"29'05", Middlesex County, at bridge on Riva Avenue, 400 ft (120 m) upstream from mouth, 0.5 mi (0.8 km) southwest of Patricks Corner.	6.52 (16.89 km^2)	1973-77	4-20-77 8-29-77	4.0 1.8
01404700	Beaverdam Brook near Patricks Corner, NJ	Lat 40°25'37", long 74°27'16", Middlesex County, at bridge on Fresh Ponds Road, 0.8 mi (1.3 km) upstream from mouth, 1.2 mi (1.9 km) east of Patricks Corner.	1.51 (3.91 km^2)	1973-77	4-20-77 8-29-77	0.06 .15

Discharge measurements made at low-flow partial-record stations during water year 1977--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
		Raritan River basin--Continued				
01405470	Iresick Brook at East Spotswood, NJ	Lat 40"23'35", long 74°21'36", Middlesex County, at bridge on Route 527 in East Spotswood, 0.6 mi (1.0 km) from mouth, 1.4 mi (2.3 km) south of Old Bridge.	2.29 (5.93 km^2)	1973-77	4-21-77 8-29-77	1.3 .32
		Cedar Creek basin				
01408800	Webbs Mill Branch near Whiting, NJ	Lat 39°53'16", long 74°22'49", Ocean County, at bridge on Warren Grove-Whiting road, 3.3 mi (5.3 km) upstream from Chamberlain Branch, 4.5 mi (7.2 km) south of Whiting.	2.92 (7.56 km^2)	1973-77	4-20-77 8-30-77	2.3 1.3
01408810	Webbs Mill Branch tributary near Whiting, NJ	Lat 39°53'29", long 74°22'52", Ocean County, at bridge on Warren Grove-Whiting road, 0.4 mi (0.6 km) upstream from mouth, 4.3 mi (6.9 km) south of Whiting.	0.53 (1.37 km^2)	1973-77	4-20-77 8-30-77	0 0
		Mullica River basin				
*01409375	Mullica River near Atco, NJ	Lat 39°47'08", long 74°51'38", Camden County, on left bank 50 ft (15 m) downstream from Jackson-Medford Road and 1.8 mi (2.9 km) northeast of Pennsylvania-Reading Seashore Lines railroad and Atco Street in Atco.	3.22 (8.34 km^2)	1975-77	4-20-77 8-29-77	2.6 .23
01409390	Mullica River at Atsion, NJ	Lat 39°44'19", long 74°43'20", Burlington County, at Central Railroad of New Jersey bridge in Atsion, 500 ft (152 m) downstream from Wesickaman Creek, and 0.3 mi (0.5 km) southeast of Atsion.	33.1 (85.7 km^2)	1975-77	8-29-77	12
01409395	Mullica River tributary near Atsion, NJ	Lat 39°41'29", long 74°40'53", Atlantic County, 0.2 mi (0.3 km) upstream from mouth, 3.8 mi (6.1 km) northwest of Batsto, and 4.2 mi (6.8 km) southeast of Atsion.	4.10 (10.62 km^2)	1975-77	9-12-77	4.4
*01409402	Hays Mill Creek near Chesilhurst, NJ	Lat 39°45'02", long 74°50'28", Camden County, at bridge on Tremont Avenue, 0.5 mi (0.8 km) upstream from Cooper Branch, 2.0 mi (3.2 km) northeast of Chesilhurst and 2.8 mi (4.5 km) southeast of Atco.	7.13 (18.47 km^2)	1974-77	4-20-77 8-29-77	9.5 5.0
*01409403	Wildcat Branch at Chesilhurst, NJ	Lat 39°44'04", long 74°51'33", Camden County, at culvert on Old White Horse Pike, 0.6 mi (1.0 km) north of Chesilhurst, 1.5 mi (2.4 km) upstream from mouth, and 2.9 mi (4.6 km) southeast of Atco.	1.03 (2.67 km^2)	1974-77	4-20-77 8-29-77	.04 0
01409404	Sleeper Branch near Atsion, NJ	Lat 39°42'46", long 74°44'36", Atlantic County, at bridge on U.S. Route 206, 0.1 mi (0.2 km) upstream from Clark Branch, 0.6 mi (1.0 km) south of Dutchtown, and 2.1 mi (3.4 km) south of Atsion.	18.2 (47.1 km^2)	1975-77	8-29-77	0.48
01409405	Clark Branch near Atsion, NJ	Lat 39°42'42", long 74°44'39", Atlantic County, at bridge on U.S. Route 206, 0.1 mi (0.2 km) upstream from Sleeper Branch, 0.7 mi (1.1 km) south of Dutchtown, and 2.2 mi (3.5 km) south of Atsion.	7.12 (18.44 km^2)	1975-77	9-12-77	8.2
01409406	Sleeper Branch at Batsto, NJ	Lat 39°38'48", long 74°39'39", Atlantic County, at foot bridge 600 ft (180 m) upstream from Mullica River, and 0.6 mi (1.0 km) northwest of Batsto.	36.1 (93.5 km^2)	1975-77	8-29-77	1.0

Discharge measurements made at low-flow partial-record stations during water year 1977--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
		Mullica River basin--Continued				
*01409407	Pump Branch near Blue Anchor, NJ	Lat 39°42'22", long 74°53'04", Camden County, at highway bridge, 0.4 mi (0.6 km) upstream from Hobb Lake, and 1.2 mi (1.9 km) north of Blue Anchor.	6.20 ($16.06\ km^2$)	1974-77	4-20-77 8-29-77	2.3 .79
*01409409	Blue Anchor Brook near Blue Anchor, NJ	Lat 39°41'17", long 74°51'00", Camden County, on upstream left side of bridge on Spring Garden Road, 1.8 mi (2.9 km) east of Blue Anchor, 1.8 mi (2.9 km) north of Winslow, and 2.2 mi (3.5 km) upstream from Albertson Brook.	3.01 ($7.80\ km^2$)	1974-77	4-20-77 8-29-77	.75 .30
01409410	Albertson Brook near Hammonton, NJ	Lat 39°41'41", long 74°45'21", Atlantic County, at bridge on U.S. Route 206, 3.1 mi (5.0 km) downstream from confluence of Pump Branch and Blue Anchor Brook, 3.5 mi (5.6 km) south of Atsion, and 5.2 mi (8.4 km) northeast of Hammonton.	19.3 ($50.0\ km^2$)	1975-77	9-12-77	14
01409411	Nescochague Creek at Pleasant Mills, NJ	Lat 39°38'28", long 74°39'43", Atlantic County, at bridge on sand road in Pleasant Mills, 0.2 mi (0.3 km) upstream from Mullica River, and 0.6 mi (1.0 km) west of Batsto.	43.8 ($113.4\ km^2$)	1975-77	8-29-77	18
01409450	Springers Brook near Indian Mills, NJ	Lat 39°46'45", long 74°44'20", Burlington County, at highway bridge on U.S. Route 206, 1.1 mi (1.8 km) south of Indian Mills, 1.9 mi (3.1 km) upstream from Bard Branch, and 2.8 mi (4.5 km) north of Atsion.	12.6 ($32.6\ km^2$)	1959-63, 1977	8-29-77	2.9
01409460	Springers Brook near Atsion, NJ	Lat 39°44'26", long 74°41'02", Burlington County, at site 110 ft (34 m) upstream from unnamed left-bank tributary, 700 ft (210 m) downstream from Deep Run, and 2.8 mi (4.5 km) east of Atsion.	21.2 ($54.9\ km^2$)	1975-77	8-29-77	1.5
01409575	Landing Creek at Philadelphia Avenue at Egg Harbor City, NJ	Lat 39°32'52", long 74°37'33", Atlantic County, at bridge on Philadelphia Avenue (State Route 563), 0.1 mi (0.2 km) upstream from Union Creek, 1.7 mi (2.7 km) northeast of intersection of Routes, 30, 563, and 50 in Egg Harbor City, and 6.1 mi (9.8 km) upstream from mouth.	4.86 ($12.59\ km^2$)	1974, 1976-77	4-21-77 8-30-77	6.4 9.4
01409730	West Branch Wading River near Chatsworth, NJ	Lat 39°45'43", long 74°32'27", Burlington County, at bridge on County Route 563, 0.6 mi (1.0 km) downstream from Pole Branch, and 2.9 mi (4.7 km) south of Chatsworth.	44.8 ($116.0\ km^2$)	1975-77	9-12-77	16
01409780	Tulpehocken Creek near Jenkins, NJ	Lat 39°42'51", long 74°33'58", Burlington County, at bridge on Maxwell-Friendship Road, 0.2 mi (0.3 km) upstream from mouth, and 2.3 mi (3.7 km) northwest of Jenkins.	21.9 ($56.7\ km^2$)	1975-77	8-30-77	4.1
01409970	Oswego River at Oswego Lake, NJ	Lat 39°43'53", long 74°29'31", Burlington County, at bridge on Little Hawkin Road at outlet of Oswego Lake, 0.6 mi (1.0 km) downstream from Breeches Branch, and 3.0 mi (4.8 km) northwest of Jenkins.	64.4 ($116.8\ km^2$)	1975-77	8-30-77	7.2

Discharge measurements made at low-flow partial-record stations during water year 1977--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
		Great Egg Harbor River basin				
01410784	Great Egg Harbor River near Sicklerville, NJ	Lat 39°44'02", long 74°57'05", Camden County, at bridge on Sicklerville-New Freedom Road (Spur 536), 1.5 mi (2.4 km) northeast of Sicklerville.	15.1 (39.1 km^2 Revised)	1971-77	8-29-77	3.3
01410803	Fourmile Branch at Winslow Crossing, NJ	Lat 39°42'07", long 74°58'11", Camden County, 1.0 mi (1.6 km) south of Sicklerville and 2.0 mi (3.2 km) upstream from mouth.	6.22 (16.11 km^2)	1972-77	8-30-77	2.2
01411053	Hospitality Branch at Berryland, NJ	Lat 39°36'31", long 74°54'34", Gloucester County, at bridge on Piney Hollow Road, 0.3 mi (0.5 km) southwest of Berryland, 1.2 mi (1.9 km) upstream of Oak Branch and 3.4 mi (5.5 km) west of Folsom.	20.0 (51.8 km^2)	1976-77	4-21-77 8-30-77	20 4.5
01411140	Deep Run at Weymouth, NJ	Lat 39°30'26", long 74°46'56", Atlantic County, at bridge on State Highway 559, 0.3 mi (0.5 km) upstream of mouth, and 0.5 mi (0.8 km) southwest of Weymouth.	20.0 (51.8 km^2)	1976-77	4-21-77 8-30-77	20 13

* Also a crest-stage partial-record station.
‡ Operated as a continuous-record gaging station.

CREST-STAGE PARTIAL RECORD STATIONS

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, and discharge measurements may have been made for purposes of establishing the stage-discharge relation, but these are not published herein. The years given in the period of record represent water years for which the annual maximum has been determined. The gage heights are heights on the upstream side of the bridge, above the dam or at the discontinued continuous-record gaging station unless otherwise noted.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Hackensack River basin					
*01377475	Musquapsink Brook near Westwood, NJ	Lat 40°59'41", long 74°03'42", Bergen County, at bridge on Pascack Road in Washington Borough, 1.5 mi (2.4 km) west of Westwood, and 5.3 mi (8.5 km) above mouth. Datum of gage before 1973 was 69.67 ft (Revised, 21.235 m) NGVD.	2.16 (5.59 km^2)	1965-77	2-08-75	bd0.95	d225
					9-21-66	bd0.82	d208
					8-03-67	bd0.59	d180
					5-29-68	bd1.48	d310
					3-25-69	bd0.90	d220
					4-02-70	bd0.92	c222
					6-19-72	b3.84	c850
					9-04-74	b2.93	c450
					9-25-75	b3.75	d900
					7-01-76	b2.87	d420
					2-24-77	-	360
01377490	Musquapsink Brook at Westwood, NJ	Lat 40°59'11", long 74°02'03", Bergen County, at footbridge at Bogert Pond, 8 ft (2 m) upstream from dam near intersection of Mill Street and First Avenue in Westwood. Datum of gage is 47.67 ft (14.530 m) NGVD.	6.53 (16.91 km^2)	1966-77	2-24-77	1.44	249
*01378350	Tenakill Brook at Cresskill, NJ	Lat 40°56'30, long 73°57'52", Bergen County, at bridge on Madison Avenue in Cresskill, 0.15 mi (0.24 km) west of Erie Lackawanna Railroad Station, and 3.3 mi (5.3 km) upstream from Oradell Reservoir. Datum of gage is 32.43 ft (Revised 9.85 m) NGVD.	3.01 (7.80 km^2)	1966-77	2-08-65	bd3.44	130
					9-21-66	bd4.41	180
					8-28-71	b4.83	d190
					6-19-72	b4.01	d142
					2-02-73	b4.50	d182
					12-21-73	b3.47	d147
					9-27-75	b4.63	d188
					2-24-77	b4.56	185
*01378385	Tenakill Brook at Closter, NJ	Lat 40°58'29", long 73°58'06", Bergen County, at bridge on High Street in Closter, 0.7 mi (1.1 km) upstream from mouth. Datum of gage is 23.85 ft (7.270 m) NGVD.	8.56 (22.17 km^2)	1965-77	2-08-65	bd2.82	d290
					9-21-66	bd3.45	d367
					3-07-67	b2.89	d300
					5-29-68	b4.24	d465
					6-15-69	b3.43	d365
					2-02-73	b3.78	d680
					12-21-73	b4.35	d830
					9-27-75	b4.51	d870
					9-17-76	b3.39	d580
*01378590	Metzler Brook at Englewood, NJ	Lat 40°54'32", long 73°59'40", Bergen County, at bridge on Lantana Avenue in Englewood, and 1.6 mi (2.6 km) upstream from mouth. Datum of gage is 43.10 ft (13.137 m) NGVD.	1.54 (3.99 km^2)	1965-77	6-15-69	b2.39	d255
					8-28-71	b2.30	d220
					6-19-72	b2.53	d310
					10-23-72	b2.46	d280
					4-09-75	b2.21	d205
					9-27-75	-	d230
					2-24-77	b2.43	270
*01378615	Wolf Creek at Ridgefield, NJ	Lat 40°49'45", long 74°00'14", Bergen County, at bridge on Clark Avenue in Ridgefield and 0.9 mi (1.4 km) upstream from mouth. Datum of gage is 12.1 ft (3.69 m) NGVD.	1.18 (3.06 km^2)	1965-77	7-18-65	b2.50	c165
					9-21-66	bd5.4	c283
					7-03-67	b5.13	c273
					8-01-68	-	c260
					6-15-69	bd6.14	c300
					4-02-70	b3.29	d202
					6-22-72	bd4.97	d400
					2-02-73	b4.94	d395
					9-04-74	b5.63	d490
					9-27-75	b6.59	d620
					9-17-76	b5.22	d539
					3-23-77	b4.79	385
01378690	Passaic River at Bernardsville, NJ	Lat 40°44'03", long 74°32'26", Somerset County, at bridge on U.S. Route 202, 1.8 mi (2.9 km) northeast of Bernardsville, and 3.0 mi (4.8 km) upstream from Great Brook. Datum of gage is 238.07 ft (72.564 m) NGVD.	8.83 (22.87 km^2)	1968-77	3-23-77	b4.14	923

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

CREST-STAGE PARTIAL-RECORD STATIONS

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft³/s)
		Hackensack River basin--Continued					
01381900	Passaic River at Pine Brook, NJ	Lat 40°51'45", long 74°19'18", Morris County, at bridge on U.S. Route 46, 0.5 mi east of Pine Brook, and 1.3 mi downstream from Rockaway River. Datum of gage is 159.26 ft (48.542 m) NGVD.	349 (904 km²)	1966-75	5-08-67	bd9.69	d2,800
01387880	Pond Brook at Oakland, NJ	Lat 41°01'36", long 74°14'04", Bergen County, at bridge on NJ Route 208 in Oakland, 0.2 mi (0.3 km) upstream from former site at Franklin Avenue (prior to October 1975), 0.6 mi (1.0 km) upstream from mouth, and 1.5 mi (2.4 km) northwest of Franklin Lakes.	6.76 (17.51 km²)	1968-71, 1976-77	5-29-68	f11.64	c1,300
					3-25-69	f8.48	c305
					8-10-76	2.44	320
					3-23-77	3.02	475
		Passaic River basin					
01389900	Fleischer Brook at Market Street, Elmwood Park, NJ	Lat 40°53'57", long 74°19'19", Bergen County, at culvert on Market Street in Elmwood Park (formerly East Paterson), and 2.0 mi (3.2 km) upstream from mouth. Datum of gage is 35.31 ft (10.762 m) NGVD.	1.37 (3.55 km²)	1967-77	2-24-77	3.95	218
*01390450	Saddle River at Upper Saddle River, NJ	Lat 41°03'32", long 74°05'44", Bergen County, at culvert on Lake Street in Upper Saddle River, and 1.3 mi (2.1 km) downstream from Pine Brook. Datum of gage is 186.11 ft (Revised, 56.726 m) NGVD.	10.9 (28.2 km²)	1966-77	9-22-66	bd4.17	d980
					8-03-67	bd3.56	d500
					5-29-68	bd4.81	d2,250
					6-15-69	bd3.39	d420
					4-02-70	bd4.43	d1,370
					8-28-71	bd4.90	2,610
					5-15-72	bd3.90	d720
					2-02-73	bd5.02	d3,070
					12-21-73	bd4.52	d1,550
					9-27-75	bd4.91	d2,700
					1-27-76	b3.94	d980
					2-25-77	b4.82	2,420
01390500	Saddle River at Ridgewood, NJ	Lat 40°59'05", long 74°05'30", Bergen County, on left bank 15 ft (4.6 m) upstream from bridge on State Highway 17, in Ridgewood and 2.8 mi (4.5 km) upstream from Hohokus Brook. Datum of gage is 71.74 ft (21.866 m) NGVD.	21.6 (55.9 km²)	1954-74‡, 1975-77	2-25-77	7.95	2,120
01390810	Hohokus Brook at Allendale, NJ	Lat 41°01'37", long 74°08'44", Bergen County, at bridge on Brookside Avenue in Allendale, and 0.2 mi (0.3 km) downstream from Valentine Brook. Datum of gage is 277.46 ft (84.570 m) NGVD.	9.11 (23.60 km²)	1969-77	2-24-77	7.19	920
01390900	Ramsey Brook at Allendale, NJ	Lat 41°01'45", long 74°08'06", Bergen County, at bridge on Brookside Avenue in Allendale and 0.6 mi (1.0 km) upstream from Hohokus Brook.	2.55 (6.60 km²)	1975-77	2-24-77	b3.81	490
01391000	Hohokus Brook at Hohokus, NJ	Lat 40°59'52", long 74°06'48", Bergen County, on left bank 500 ft (152 m) upstream from Maple Avenue Bridge in Hohokus, and 3.5 mi (5.6 km) upstream from mouth. Datum of gage is 120.09 ft (36.603 m) NGVD.	16.4 (42.5 km²)	1954-73‡, 1974-77	8-10-55	4.50	d2,100
					5-29-68	4.31	d1,930
					12-21-73	c3.53	c1,250
					10-17-76	d3.17	677
					2-25-77	4.51	2,100
01391110	Saddle River at Paramus, NJ	Lat 40°56'47", long 74°05'56", Bergen County, at former site of bridge on Dunkerhook Road in Paramus, and 0.7 mi (1.1 km) downstream from Hohokus Brook. Datum of gage is 46.3 ft (14.112 m) NGVD.	45.0 (116.6 km²)	1965-77	8-10-65	b3.95	d1,310
					9-21-66	bd3.95	d1,320
					3-07-67	bd3.41	d640
					5-29-68	bd5.8	d3,480
					4-02-70	b4.11	d1,440
					6-19-72	b2.86	d830
					2-25-77	-	-

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Passaic River basin--Continued					
*01391485	Sprout Brook at Rochelle Park, NJ	Lat 40°54'45", long 74°04'47", Bergen County, at bridge on Passaic Street in Rochelle Park, and 0.9 mi (1.4 km) upstream from mouth. Datum of gage is 33.25 ft (10.135 m) NGVD.	5.56 (14.40 km^2)	1965-77	2-08-65	bd4.68	c305
					9-21-66	b4.50	d290
					3-07-67	b3.30	d190
					5-29-68	bd6.42	c455
					4-02-70	b2.95	c168
					9-12-71	bd7.11	d520
					6-19-72	bc4.21	c265
					2-02-73	bc5.18	c342
					12-21-73	b4.78	d310
					9-27-75	b4.22	d267
					2-25-77	b5.48	370
01392000	Weasel Brook at Clifton, NJ	Lat 40°52'12", long 74°08'47", Passaic County, at right end of masonry dam at Jewett Street in Clifton. Datum of gage is 68.52 ft (20.885 m) NGVD.	4.45 (11.53 km^2)	1937-62‡, 1963-77	2-25-77	-	-
01392500	Second River at Belleville, NJ	Lat 40°47'17", long 74°10'19", Essex County, on Mill Street in Branch Brook Park at Belleville, 300 ft (91 m) downstream from Franklin Avenue, and 1,100 ft (335 m) downstream from Hendricks Pond dam. Datum of gage is 62.6 ft (19.08 m) NGVD.	11.6 (30.04 km^2)	1937-64‡, 1965-77	8-28-71	d9.8	d6,500
					2-25-77	7.08	3,320
		Raritan River basin					
01397500	Walnut Brook near Flemington, NJ	Lat 40°30'55", long 74°52'52", Hunterdon County, on right bank 1.2 mi (1.9 km) northwest of Flemington, and 2.3 mi (3.7 km) upstream from mouth. Datum of gage is 267.33 ft (81.482 m) NGVD.	2.24 (5.80 km^2)	1936-61‡, 1965-77	7-12-77	3.73	910
01398500	North Branch Raritan River near Far Hills, NJ	Lat 40°42'30", long 74°38'11", Somerset County, on left bank 75 ft (23 m) upstream from Ravine Lake Dam, 1.6 mi (2.6 km) north of Far Hills, and 2.3 mi (3.7 km) upstream from Peapack Brook. Datum of gage is 224.49 ft (68.425 m) NGVD.	26.2 (67.9 km^2)	1921-75‡, 1976-77	3-22-77	4.77	2,050
01399550	Lamington River near Whitehouse, NJ	Lat 40°38'02", long 74°43'38", Hunterdon County, on right abutment of bridge on Halls Bridge Road, 1.2 mi (1.9 km) northeast of Whitehouse, and 1.2 mi (1.9 km) upstream from Rockaway Creek.	57.3 (148.4 km^2)	1977	2-24-77	6.43	†
01399760	Lamington River at Lamington Road near North Branch, NJ	Lat 40°37'20", long 74°42'02", Somerset County, on right abutment of bridge on Lamington Road, 1.9 mi (3.0 km) northwest of North Branch, and 1.7 mi (2.7 km) upstream from mouth.	97.6 (252.8 km^2)	1977	2-24-77	10.95	†
01400730	Millstone River at Plainsboro, NJ	Lat 40°19'27", long 74°36'51" Mercer County, on left bank 30 ft (9 m) upstream from bridge on Penn Central railroad, 100 ft (30 m) downstream from Cranbury Brook, 0.2 mi (0.3 km) upstream from Bear Brook, and 0.9 mi (1.4 km) southwest of Plainsboro. Datum of gage is 53.41 ft (16.279 m) NGVD.	65.8 (170.4 km^2)	1965-75‡, 1976-77	10-19-75	6.20	1,890
					2-24-77	4.23	792

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

CREST-STAGE PARTIAL-RECORD STATIONS

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft³/s)
		Raritan River basin--Continued					
*01400850	Woodsville Brook at Woodsville, NJ	Lat 40°22'37", long 74°49'33", Mercer County, at bridge on secondary road, 0.3 mi (0.5 km) southeast of Woodsville, and 0.8 mi (1.3 km) upstream from mouth. Datum of gage is 226.7 ft (69.10 m) NGVD.	1.78 (4.61 km²)	1957-58, 1964-77	4-05-77	2.83	220
01400900	Stony Brook at Glenmoore, NJ	Lat 40°21'55", long 74°47'14", Mercer County, at highway bridge on Spur State Route 518, 200 ft (61 m) east of tracks of Reading Railroad, at Glenmoore, and 2.0 mi (3.2 km) southwest of Hopewell. Datum of gage is 159.1 ft (48.49 m) NGVD.	17.0 (44.03 km²)	1957-77	4-05-77	b7.48	2,700
*01400930	Baldwin Creek at Pennington, NJ	Lat 40°20'18", long 74°47'50", Mercer County, at bridge on State Route 31, 0.8 mi (1.3 km) north of Pennington, and 0.9 mi (1.4 km) upstream from Baldwin Lake dam. Datum of gage is 161.69 ft (49.283 m) NGVD.	1.99 (5.15 km²)	1960-77	9-12-60	5.87	d465
					7-29-61	6.76	d600
					2-13-66	5.75	d360
					d3-07-67	-	ad480
					5-29-68	-	a300
					9-04-69	6.24	d470
					11-29-71	5.48	d315
					6-21-73	6.18	d455
					8-03-74	5.80	d370
					7-14-75	5.84	d375
					4-05-77	5.75	360
01400947	Stony Brook at Pennington, NJ	Lat 40°19'50", long 74°46'05", Mercer County, 25 ft (7.6 m) upstream from dam at Old Mill Road, 1.3 mi (2.1 km) east of Pennington, and 1.4 mi (2.3 km) downstream from Baldwin Creek. Datum of gage is 139.26 ft (42.45 m) NGVD.	26.5 (68.6 km²)	1966-77	2-08-65	2.21	d660
					9-04-69	3.33	c3,200
					12-11-69	3.07	c2,420
					11-29-71	3.04	c2,400
					12-06-72	3.29	c3,100
					12-21-73	2.76	c1,670
					3-20-75	c2.79	c1,770
					1-27-76	c2.18	c640
					4-05-77	2.40	975
01400950	Hart Brook near Pennington, NJ	Lat 40°19'17", long 74°45'38", Mercer County, at culvert on Federal City Road, 1.6 mi (2.6 km) upstream of mouth, and 1.7 mi (2.7 km) southeast of Pennington. Datum of gage after July 1, 1975 is 163.32 ft (49.780 m) NGVD.	0.57 (1.48 km², Revised)	1968-77	5-29-68	3.30	c80
					7-28-69	5.53	c172
					12-11-69	3.41	c91
					4-02-73	5.39	d165
					7-14-75	4.97	c235
					11-13-75	2.35	c71
					4-05-77	3.65	146
01400960	Honey Branch near Mount Rose, NJ	Lat 40°21'17", long 74°45'29", Mercer County, at bridge on Mount Rose Road, 0.6 mi (1.0 km) northeast of Centerville, 1.4 mi (2.3 km) southwest of Mount Rose, and 2.5 mi (4.0 km) northeast of Pennington.	1.28 (3.31 km², Revised)	1968-77	9-04-69	b3.77	c375
					12-11-69	b2.71	c158
					8-28-71	b5.84	c1,370
					6-22-72	b2.91	c188
					6-21-73	b5.60	c1,180
					12-21-73	b3.78	c380
					7-14-75	b4.14	c490
					1-27-76	b1.91	c72
					4-05-77	b3.65	345
01400970	Honey Branch near Rosedale, NJ	Lat 40°20'26", long 74°44'39", Mercer County, at bridge on Elm Ridge Road, 0.2 mi (0.3 km) upstream from mouth, 1.2 mi (1.9 km) west of Rosedale, and 2.0 mi (3.2 km) south of Mount Rose. Datum of gage is 126.11 ft (38.438 m) NGVD.	3.83 (9.92 km²)	1967-77	4-05-77	8.25	1,050
01401200	Duck Pond Run at Clarksville, NJ	Lat 40°18'24", long 74°40'06", Mercer County, at bridge on U.S. Route 1, 0.5 mi (0.8 km) upstream from Delaware and Raritan Canal, and 0.9 mi (1.4 km) northeast of Clarksville. Datum of gage is 54.14 ft (16.502 m) NGVD.	5.21 (13.50 km²)	1965-77	4-05-77	3.47	135

CREST-STAGE PARTIAL-RECORD STATIONS

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Annual maximum Gage height (feet)	Annual maximum Discharge (ft^3/s)
		Raritan River basin--Continued					
01401301	Millstone River at Carnegie Lake at Princeton, NJ	Lat 40°22'11", long 74°37'15", Middlesex County, at right end of Carnegie Lake dam, 2.5 mi (4.0 km) northeast of Princeton. Datum of gage is 50.00 ft (15.240 m) NGVD.	159 (412 km^2)	1926-74‡,	3-23-77	4.80	5,600
*01401520	Beden Brook near Hopewell, NJ	Lat 40°23'02", long 74°44'28", Mercer County, at bridge on Aunt Molly Road, 0.8 mi (1.3 km) upstream from Province Line Road, 1.1 mi (1.8 km) southeast of Hopewell, and 2.6 mi (4.2 km) southwest of Blawenburg. Datum of gage is 116.43 ft (35.488 m) NGVD.	6.07 (15.72 km^2)	1967-77	4-05-77	6.21	1,330
01401595	Rock Brook near Blawenburg, NJ	Lat 40°25'47", long 74°41'05", Somerset County, at bridge on Burnt Hill Road, 0.7 mi (1.1 km) upstream from mouth, 1.0 mi (1.6 km) northeast of Blawenburg, and 2.8 mi (4.5 km) northwest of Rocky Hill. Datum of gage is 63.45 ft (19.340 m) NGVD.	9.03 (23.39 km^2)	1967-77	4-05-77	-	-
01401600	Beden Brook near Rocky Hill, NJ	Lat 40°24'52", long 74°39'02", Somerset County, at bridge on U.S. Route 206, 0.7 mi (1.1 km) upstream from Pike Run, 1.2 mi (1.9 km) northwest of Rocky Hill, and 4.6 mi (7.4 km) north of Princeton. Datum of gage is 38.09 ft (11.610 m) NGVD.	27.6 (71.5 km^2)	1967-77	4-05-77	b10.94	4,300
01401870	Six Mile Run near Middlebush, NJ	Lat 40°28'12", Long 74°32'42", Somerset County, at bridge on South Middlebush Road, 1.6 mi (2.6 km) upstream from mouth, and 2.1 mi (3.4 km) south of Middlebush. Datum of gage is 39.91 ft (12.165 m) NGVD.	10.7 (27.7 km^2)	1966-77	4-05-77	8.06	1,600
01403470 (Revised)	Green Brook at North Plainfield, NJ	Lat 40°38'15", long 74°24'55", Somerset County, at bridge on Leland Avenue, 0.23 mi (0.37 km) northwest of East Front Street, 0.16 mi (2.6 km) southeast of Green Brook Road in North Plainfield. Datum of gage is NGVD.	8.01 (20.75 km^2)	1972-77	3-22-77	-	1,370
01403570	Stony Brook at North Plainfield, NJ	Lat 40°37'19", long 74°26'11", Somerset County, at bridge on Green Brook Road, in North Plainfield, 100 ft (30 m) downstream of Crab Brook, and 1.4 mi (2.3 km) upstream of mouth.	6.88 (17.82 km^2)	1975-77	7-14-75 10-18-75 3-22-77	b7.51 b6.25 b4.67	† † 840
01403600	Green Brook at Rock Avenue, Plainfield, NJ	Lat 40°36'07", long 74°27'28", Somerset County, at bridge on Rock Avenue in Plainfield, 0.35 mi (0.56 km) north of West Front Street, and 0.65 mi (1.8 km) south of Route 22. Datum of gage is NGVD.	18.2 (47.1 km^2)	1972-77	3-22-77	53.15	1,500
01403700	Green Brook at Dunellen, NJ	Lat 40°35'22", long 72°28'59", Middlesex County, at bridge on Warrenville Road, 0.12 mi (0.19 km) south of Green Brook Road, 1.0 mi (1.6 km) west of the Dunellen gage. Datum of gage is NGVD.	20.7 (53.4 km^2)	1972-77	3-22-77	-	2,200

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

CREST-STAGE PARTIAL-RECORD STATIONS

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Raritan River basin--Continued					
01404080	Bound Brook at South Bound Brook, NJ	Lat 40°33'37", long 74°31'32", Somerset County, at downstream site of Reading Railroad bridge, in Bound Brook, 200 ft (60 m) upstream of mouth and 800 ft (90 m) downstream of Ambrose Brook. Datum of gage is NGVD.	65.0 (168.4 km^2)	1972-77	6-23-72 8-02-73 12-21-73 7-14-75 1-28-76 3-23-77	c26.67 c27.52 c28.32 c26.5 c24.87 26.9	† † † † † †
		Manasquan River basin					
*01407830	Manasquan River near Georgia, NJ	Lat 40°12'36", long 74°16'41", Monmouth County, at culvert on Jacksons Mill Road near Georgia, and 0.5 mi (0.8 km) upstream from Debois Creek. Datum of gage is 70.47 ft (21.479 m) NGVD.	10.6 (27.5 km^2)	1969-77	2-25-77	11.28	285
*01408015	Mingamahone Brook at Farmingdale, NJ	Lat 40°11'38", long 74°09'42", Monmouth County, at bridge on Belmar Road in Farmingdale, and 3.0 mi (4.8 km) upstream from mouth. Datum of gage is 48.64 ft (14.825 m) NGVD.	6.22 (16.11 km^2)	1969-77	7-29-79 12-26-69 7-21-75 3-23-77	4.74 6.07 7.31 4.30	c145 c268 d425 113
*01408030	Manasquan River at Allenwood, NJ	Lat 40°08'35", long 74°07'03", Monmouth County, at bridge on Hospital Road at Allenwood, and 1.5 mi (2.4 km) downstream from Mill Run.	63.9 (165.5 km^2)	1969-77	7-30-69 12-26-69 8-28-71 10-25-71 3-23-77	b8.32 b8.49 b8.37 b8.32 b6.99	c1,880 c1,980 d1,910 d1,880 1,260
		Mullica River basin					
01409375	Mullica River near Atco, NJ	Lat 39°47'08", long 74°51'38", Burlington County, on left bank of small lake 50 ft (15 m) downstream from bridge on Jackson-Medford Road, 0.7 mi (1.1 km) north of intersection of Route 534 with Jackson-Medford Road, and 1.6 mi (2.6 km) east of Atco. Datum of gage is 102.90 ft (31.364 m) NGVD.	3.22 (8.34 km^2)	1975-77	5-09-77	b4.17	17
01409402	Hays Mill Creek near Chesilhurst, NJ	Lat 39°45'02", long 74°50'28", Camden County, at bridge on Tremont Avenue in Wharton State Forest, 2 mi (3.2 km) northeast of Chesilhurst, and 0.3 mi (0.5 km) northeast of Burnt Mills Road. Datum of gage is 87.55 ft (26.685 m) NGVD.	7.13 (18.47 km^2)	1975-77	1-28-76 4-06-77	e2.48 -	e23 -
01409403	Wildcat Branch at Chesilhurst, NJ	Lat 39°44'04", long 74°51'33", Camden County, at culvert on Old Whitehouse Pike, 0.5 mi (0.8 km) east at Chesilhurst, and 0.9 mi (1.4 km) north of Waterford Works.		1975-77	2-26-77	5.41	16
01409407	Pump Branch near Blue Anchor, NJ	Lat 39°42'22", long 74°53'04", Camden County, at bridge on Barret Avenue, 0.4 mi (6 km) upstream from Hobb Lake, and 1.2 mi (1.9 km) west of Bates Mill and 1.3 mi (2.1 km) north of Blue Anchor. Datum of gage is 100.67 ft (Revised, 30.685 m) NGVD.	6.20 (16.06 km^2)	1975-77	10-27-76	b2.15	36
01409409	Blue Anchor Brook near Blue Anchor, NJ	Lat 39°41'17", long 74°51'00", Camden County, at bridge on Spring Garden Road, 4,000 ft (1,220 m) upstream of Route 30 highway bridge, 1.8 mi (2.9 km) east of Blue Anchor and 2.2 mi (3.5 km) upstream from mouth. Datum of gage is 84.94 ft (Revised, 25.890 m) NGVD.	3.01 (7.80 km^2)	1975-77	10-27-76	-	-

CREST-STAGE PARTIAL-RECORD STATIONS

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)

* Also a low-flow partial-record station.
† Discharge not determined.
‡ Operated as a continuous-record gaging station.
a Estimated.
b Downstream side of bridge.
c Not previously published.
d Revised.
e Maximum observed, probably not annual maximum.
f At former site and datum.
g Previously published qualification of this peak discharge is incorrect. Figure represents only flow over dam and earth dike, and does not include flow through break in earth dike.

The following table contains annual maximum stages for tidal crest-stage stations. The information is obtained from a crest-stage gage or a water-stage recorder located at each site. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. All stages are elevations above NGVD unless otherwise noted. Only the maximum stage is given. Information on some other high stages may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

ANNUAL MAXIMUM STAGES AT TIDAL CREST-STAGE PARTIAL-RECORD STATIONS

Station No.	Station name	Location	Period of record	Annual maximum	
				Date	Elevation NGVD (feet)
01408160	Metedeconk River near Laurelton, NJ	Lat 40°03'20", long 74°06'37", Ocean County, on pier at Laurelton Yacht Basin at Princeton Avenue. 1.4 mi (2.3 km) southeast of Laurelton, and 2.4 mi (3.9 km) upstream from mouth.	1969-77	2-19-72 12-09-73 12-02-74 8-09-76 10-25-76	a3.91 a4.36 a3.77 a2.84 3.79
01408200	Barnegat Bay at Bay Shore, NJ	Lat 39°56'56", long 74°06'52", Ocean County, at west end of State Route 37 bridge over Barnegat Bay at Bay Shore, 2.2 mi (3.5 km) west of Seaside Heights, and 4.5 mi (7.2 km) east of Toms River.	1965-77	9-25-77	3.45
01409125	Barnegat Bay at Barnegat Light, NJ	Lat 39°45'37", long 74°06'39", Ocean County, at north side of pier of U.S. Coast Guard Boat Basin on 7th Street (extended) in Barnegat Light Borough, 0.35 mi (0.56 km) southwest of Barnegat Lighthouse and 9.1 mi (14.6 km) northeast of Ship Bottom.	1965-77	4-04-73 10-29-73 12-02-74 8-09-76 9-25-77	a4.50 a4.64 a5.52 a6.16 5.22
01409145	Manahawkin Bay near Manahawkin, NJ	Lat 39°40'13", long 74°12'54", Ocean County, at west end of State Route 72 bridge over Manahawkin Bay, 2.5 mi (4.0 km) northwest of Ship Bottom, and 3.1 mi (5.0 km) southeast of Manahawkin.	1965-77	9-25-77	3.95
01409290	Tuckerton Cove near Tuckerton, NJ	Lat 39°34'35", long 74°19'50", Ocean County, on bulkhead piling of Tuckerton Cove at the Tuckerton Beach Club, at the southern end of State Route 539, 0.4 mi (0.6 km) east of mouth of Tuckerton Creek, and 1.9 mi (3.1 km) south of Tuckerton.	1965-77	9-25-77	5.27
01409510	Batsto River at Pleasant Mills, NJ	Lat 39°37'55", long 74°38'40", Ocean County, on right bank, 0.5 mi (0.8 km) upstream from mouth, and 1.0 mi (1.6 km) southeast of Pleasant Mills.	1958-77‡	9-25-77	4.12
01410100	Mullica River near Port Republic, NJ	Lat 39°33'12", long 74°27'46", Atlantic County, on right bank on bulkhead piling at south end of U.S. Route 9 and Garden State Parkway bridge over Mullica River, 2.8 mi (4.5 km) northeast of Port Republic, and 2.8 mi (4.5 km) south of New Gretna.	1965-77	9-25-77	5.77
01410500	Absecon Creek at Absecon, NJ	Lat 39°25'45", long 74°31'16", Atlantic County, on right bank 30 ft (9.1 m) downstream from Doughty Pond Dam of Atlantic City Water Department, 1 mi (1.6 km) west of Absecon, and 3.4 mi (5.5 km) upstream from mouth.	1923-29‡, 1933-38‡, 1946-77‡	9-25-77	4.95
01411315	Great Egg Harbor Bay at Beesleys Point, NJ	Lat 39°17'18", long 74°37'50", Cape May County, at Atlantic City Electric Company's B. L. England Generating Station intake, 0.1 mi (0.2 km) west of south end of Route 9 bridge over Great Egg Harbor Bay, 0.7 mi (1.1 km) north of Beesleys Point, and 3.0 mi (4.8 km) west of Ocean City.	1963-77‡	9-25-77	b4.5

ANNUAL MAXIMUM STAGES AT TIDAL CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Period of record	Annual maximum	
				Date	Elevation NGVD (feet)
01411320	Great Egg Harbor Bay at Ocean City, NJ	Lat 39°17'03", long 74°34'41", Cape May County, on bulkhead piling at west end of 7th Street (gage relocated from 5th Street in October 1974), Ocean City, and 2.5 mi (4.0 km) southeast of Sommers Point.	1965-77	9-25-77	c6.67
01411360	Great Channel at Stone Harbor, NJ	Lat 39°03'26", long 74°45'53", Cape May County, on bulkhead piling at east end of bridge at west end of town of Stone Harbor, 3.7 mi (6.0 km) southeast of Cape May Court House, and 3.9 mi (6.3 km) southwest of Avalon.	1965-77	9-25-77	6.56
01411380	Grassy Sound at West Wildwood, NJ	Lat 39°00'25", long 74°49'47", Cape May County, on bridge piling near northeast end of Glenwood Avnenue at northern tip of West Wildwood, 1.2 mi (1.9 km) northwest of Wildwood, and 2.9 mi (4.7 km) east of Rio Grande.	1965-77	12-02-74 8-09-76 9-25-77	ac12.13 ac10.66 c12.14
01411390	Cape May Harbor at Cape May, NJ	Lat 38°56'54", long 74°53'26", Cape May County, on grounds of U.S. Coast Guard Receiving Center in Cape May, and 0.7 mi (1.1 km) southeast of east end of Cape May Canal.	1965-77	9-25-77	6.70

‡ Operated as a continuous-record gaging station.
a Revised.
b Furnished by Atlantic City Electric Co., adjusted to NGVD.
c Gage datum; not NGVD datum.
d Furnished by National Ocean Survey.

DISCHARGE MEASUREMENT AT MISCELLANOUS SITES

Measurements of streamflow at points other than gaging stations are given in the following table. Those that are measurements of base flow are designated by an asterisk (*); measurements of peak flow by a dagger (†).

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1977

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		Hudson River basin				
01367770 Wallkill River	Rondout Creek	Lat 41°11'38", long 74°34'32", Sussex County, at bridge 0.6 mi (1.0 km) upstream of Papakating Creek, 1.7 mi (2.7 km) southwest of Independence Corner, 2.0 mi (5.2 km) southeast of Sussex, and 2.1 mi (3.4 km) northwest of McAfee.	60.8 (157.5 km^2)	-	9-21-77	*37
01367910 Papakating Creek	Wallkill River	Lat 41°12'02", long 74°35'59" Sussex County, at bridge on State Highway 23, 0.6 mi (1.0 km) south of Sussex, 2.0 mi (5.2 km) upstream from mouth, 2.6 mi (4.2 km) southwest of Independence Corner, and 3.4 mi (5.6 km) northwest of McAfee.	59.4 (153.8 km^2)	-	9-22-77	*19
01368950 Black Creek	Pochuck Creek	Lat 41°13'21", long 74°28'33" Sussex County, at highway bridge on Appalachian Trail, 0.6 mi (1.0 km) upstream of mouth, 0.7 mi (1.1 km) northwest of Maple Grange, and 1.7 mi (2.7 km) northeast of Vernon.	17.3 (44.8 km^2)	-	9-22-77	*5.5
		Raritan River basin				
01398102 South Branch Raritan River	Raritan River	Lat 40°32'48", long 74°41'48", Somerset County, at bridge on South Branch Road in South Branch, and 2.0 mi (3.2 km) north of Flagtown.	265 (686 km^2)	1975-76	7-11-77	142
01399120 North Branch Raritan River	Raritan River	Lat 40°38'09", long 74°40'56", Somerset County, at bridge on Burnt Mills Road, 0.1 mi (0.2 km) upstream from Lamington River, 0.3 mi (0.5 km) east of Burnt Mills, and 4.0 mi (6.4 km) southwest of Far Hills.	63.8 (165.2 km^2)	1964, 1975-76	12- 7-76	39
					3- 5-77	443
					3-12-77	108
					4- 6-77@1250	393
					4- 6-77@1330	378
					5-22-77	55
					6- 6-77	*32
					6- 9-77	102
					6-26-77	103
					7-11-77	26
01399575 Rockaway Creek	Lamington River	Lat 40°38'36", long 74°45'38", Hunterdon County, at bridge on State Highway 523, 1.3 mi (2.1 km) south of McCrea Mills, 1.6 mi (2.6 km) upstream from South Branch Rockaway Creek and 2.0 mi (3.2 km) east of Potterstown.	18.5 (47.9 km^2)	-	12- 7-76@0900	19
					12- 7-76@1445	261
					3- 4-77	127
					3-13-77	113
					5- 7-77	30
					6- 5-77	*12
					6- 9-77@1300	34
					6- 9-77@1500	51
					6-26-77	22
					7- 6-77	*8.8
01399695 Rockaway Creek	Lamington River	Lat 40°37'31", long 74°45'25", Hunterdon County, at bridge on Mill Road, 0.4 mi (0.6 km) north of Whitehouse, 0.4 mi (0.6 km) downstream from South Branch of Rockaway Creek.	35.6 (92.2 km^2)	-	12- 7-76	94
					3- 4-77	221
					3- 6-77	90
					3-13-77@0950	98
					3-13-77@1500	1060
					4- 6-77@1015	198
					4- 6-77@1045	205
					5- 7-77	54
					5-22-77	29
					6- 5-77	*21
					6- 9-77@1400	56
					6- 9-77@1550	78
					6-26-77	42
					7-14-77	171
					7-19-77	278
					7-26-77	434

DISCHARGE MEASUREMENTS AT MISCELLANOUS SITES

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1977--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		Raritan River basin				
01399720 Rockaway Creek	Lamington River	Lat 40°37'24", long 74°43'17", Hunterdon County, at bridge on Island Road, 0.6 mi (1.0 km) upstream from mouth, 0.9 mi (1.4 km) east of Whitehouse, and 2.5 mi (4.0 km) northwest of North Branch.	38.4 (99.5 km^2)	-	3- 6-77	99
					3-12-77	*46
					3-13-77	233
					5-22-77	28
					6-26-77	69
					7-14-77	170
					7-19-77	290
					7-26-77	430
01399780 Lamington River	North Branch Raritan River	Lat 40°38'09", long 74°40'56", Somerset County, at bridge on Walsh Road at Burnt Mills, 0.2 mi (0.3 km) upstream from North Branch Raritan River, and 4.4 mi (7.0 km) southwest of Far Hills.	100 (259 km^2)	1964,73, 1975-76	12- 7-76@1010	67
					12- 7-76@1340	208
					3- 5-77	490
					3-12-77	*137
					3-13-77@1100	204
					3-13-77@1145	282
					3-13-77@1215	395
					3-13-77@1400	1870
					5-22-77	82
					6- 6-77	*52
					6- 9-77	100
					6-26-77	176
					7-14-77	208
					7-19-77	296
					7-26-77	446
01400120 Raritan River	Raritan Bay	Lat 40°33'52", long 74°38'10", Somerset County, at bridge on South Branch-Raritan road in Raritan, and 3.5 mi (5.6 km) northeast of South Branch.	474 (1228 km^2)	1975-76	7-11-77	230
01405285 Barclay Brook	Matchaponix Brook	Lat 40°20'53", long 74°21'27", Middlesex County, at bridge on State Route 527 (Old Bridge-Englishtown Road), 0.6 mi (1.0 km) south of Redshaw Corner, 0.9 mi (1.4 km) upstream of mouth and 3.5 mi (5.6 km) north of Englishtown.	4.94 (12.80 km^2)	-	9-20-77	*2.4

* Base flow.
† Peak flow.
a Not previously published.

CAMDEN COUNTY

394215074561702. Local I.D., New Brooklyn Park 2 Obs.
LOCATION.--Lat 39°42'15", long 74°56'17", Hydrologic Unit 02040302, on eastern shore of New Brooklyn Lake approximately 900 ft (270 m) upstream at Route 536, Winslow Township.
Owner: U.S. Geological Survey.
AQUIFER.--Magothy-Raritan undifferentiated of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 848 ft (258 m), screened 830 to 848 ft (253 to 258 m).
DATUM.--Altitude of land-surface datum, 111.1 ft (33.86 m). Measuring point: Top edge of recorder shelf, 3.3 ft (1.0 m) above land-surface datum.
REMARKS.--
PERIOD OF RECORD.--January 1963 to August 1975 and current year beginning March 1977.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 131.54 ft (40.093 m) below land-surface datum, Mar. 6, 1963; lowest water level, 179.16 ft (54.608 m) below land-surface datum, July 28, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 169.38 ft (51.627 m) below land-surface datum, Apr. 5; lowest water level, 179.16 ft (54.608 m) below land-surface datum, July 28.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	169.44	170.78	175.19	176.91	---	---
10	---	---	---	---	---	170.19	169.81	170.72	175.13	177.41	---	---
15	---	---	---	---	---	169.99	169.77	171.02	175.06	177.23	---	---
20	---	---	---	---	---	169.88	170.32	172.12	175.14	177.82	---	---
25	---	---	---	---	---	169.73	170.64	173.25	175.86	178.81	---	---
EOM	---	---	---	---	---	169.59	170.81	174.75	176.25	179.03	---	175.80
MEAN	---	---	---	---	---	169.87	170.07	171.87	175.34	177.73	---	175.79

WTR YR 1977 MEAN 173.28 HIGH 169.44 APR 5 LOW 179.12 JUL 28

NOTE.--No record Aug. 3-Sept. 26.

CAMDEN COUNTY

394215074561703. Local I.D., New Brooklyn Park 3 Obs.
LOCATION.--Lat 39°42'15", long 74°56'17", Hydrologic Unit 02040302, on eastern shore of New Brooklyn Lake approximately 900 ft (270 m) upstream of Route 536, Winslow Township.
Owner: U.S. Geological Survey.
AQUIFER.--Mount Laurel-Wenonah undifferentiated of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 530 ft (162 m), screened 520 to 530 ft (158 to 162 m).
DATUM.--Altitude of land-surface datum 111.4 ft (33.95 m). Measuring point: Top of 6 inch coupling, 2.1 ft (0.64 m) above land-surface datum.
REMARKS.--
PERIOD OF RECORD.--December 1962 to August 1975 and current year beginning March 1977.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 58.53 ft (17.840 m) below land-surface datum, Dec. 18, 1962; lowest water level, 74.65 ft (22.753 m) below land-surface datum, Sept. 16, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 72.48 ft (22.092 m) below land-surface datum, Mar. 22; lowest water level, 74.65 ft (22.753 m) below land-surface datum, Sept. 16.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	72.65	73.10	73.46	73.84	74.20	74.38
10	---	---	---	---	---	72.85	73.06	73.08	73.39	73.91	74.22	74.33
15	---	---	---	---	---	72.74	73.03	73.26	73.60	73.95	74.26	74.57
20	---	---	---	---	---	72.78	73.18	73.36	73.55	73.97	74.29	74.43
25	---	---	---	---	---	72.76	72.97	73.42	73.69	74.01	74.36	74.56
EOM	---	---	---	---	---	72.80	73.18	73.50	73.72	74.08	74.46	74.61
MEAN	---	---	---	---	---	72.78	73.01	73.27	73.56	73.94	74.27	74.46

WTR YR 1977 MEAN 73.64 HIGH 72.58 MAR 23 LOW 74.63 SEP 16

CAMDEN COUNTY

394215074561704. Local I.D., New Brooklyn Park 4 Obs.
LOCATION.--Lat 39°42'15", long 74°56'17", Hydrologic Unit 02040302, on eastern shore of New Brooklyn Lake approximately 900 ft (270 m) upstream of Route 536, Winslow Township.
Owner: U.S. Geological Survey.
AQUIFER.--Kirkwood Sand of Miocene Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 210 ft (64.0 m), screened 200 to 210 ft (61.0 to 64.0 m).
DATUM.--Altitude of land-surface datum 111.2 ft (33.89 m). Measuring point: Top of 6 inch coupling, 2.3 ft (0.70 m) above land-surface datum.
REMARKS.--
PERIOD OF RECORD.--December 1962 to August 1975 and current year beginning March 1977.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.56 ft (0.171 m) below land-surface datum, Dec. 27, 1972; lowest water level, 2.28 ft (0.695 m) below land-surface datum, Aug. 31, 1966.
EXTREMES FOR CURRENT YEAR.--Highest water level, 0.62 ft (0.189 m) below land-surface datum, Mar. 24-25; lowest water level, 1.34 ft (0.408 m) below land-surface datum, Aug. 30-31.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	0.68	0.87	1.05	1.17	1.29	1.21
10	---	---	---	---	---	0.83	0.75	0.81	0.99	1.15	1.30	1.16
15	---	---	---	---	---	0.80	0.81	0.89	1.03	1.16	1.28	1.23
20	---	---	---	---	---	0.74	0.87	0.96	1.04	1.21	1.28	1.20
25	---	---	---	---	---	0.62	0.84	1.03	1.11	1.26	1.29	1.24
EOM	---	---	---	---	---	0.74	0.81	1.05	1.10	1.26	1.34	1.19
MEAN	---	---	---	---	---	0.75	0.79	0.92	1.04	1.19	1.29	1.20

WTR YR 1977 MEAN 1.03 HIGH 0.62 MAR 25 LOW 1.34 AUG 31

ESSEX COUNTY

404452074211601. Local I.D., Canoe Brook 30 Obs.
LOCATION.--Lat 40°44'52", long 74°21'16", Hydrologic Unit 02030103, about 0.3 mi (0.48 km) north of Canoe Brook pumping station, near Chatham.
Owner: Commonwealth Water Company.
AQUIFER.--Stratified drift of Pleistocene age.
WELL CHARACTERISTICS.--Drilled semi-artesian observation well, diameter 10 in (254 mm), depth 130 ft (39.6 m).
DATUM.--Altitude of land-surface datum, 170 ft (51.8 m). Measuring point: Top edge of recorder shelf, 6.6 ft (2.01 m) above land-surface datum.
REMARKS.--
PERIOD OF RECORD.--1925 to May 1975 and current year beginning April 1977.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.25 ft (2.210 m) below land-surface datum, Aug. 25, 1931; lowest water level, 86.69 ft (26.423 m) below land-surface datum, Sept. 15, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 76.84 ft (23.421 m) below land-surface datum, Apr. 21; lowest water level, 86.69 ft (26.423 m) below land-surface datum, Sept. 15.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	81.03	83.01	84.52	85.66	86.06
10	---	---	---	---	---	---	---	80.66	82.43	85.27	85.83	86.03
15	---	---	---	---	---	---	---	82.08	82.63	85.18	86.04	86.64
20	---	---	---	---	---	---	76.95	82.50	83.44	85.39	86.04	86.19
25	---	---	---	---	---	---	77.49	82.81	83.93	85.47	86.16	86.34
EOM	---	---	---	---	---	---	80.89	83.07	84.41	85.66	86.12	86.36
MEAN	---	---	---	---	---	---	78.24	81.96	83.19	85.23	85.91	86.24

WTR YR 1977 MEAN 84.08 HIGH 76.95 APR 20 LOW 86.64 SEP 15

MERCER COUNTY

402131074461201. Local I.D., Honey Branch 10 Obs.
LOCATION.--Lat 40°21'28", long 74°46'13", Hydrologic Unit 02030105, on the lands of Stony Brook-Millstone Watershed Association, near Pennington.
Owner: Stony Brook-Millstone Watershed Association.
AQUIFER.--Brunswick Shale of Triassic Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), cased to approximately 20 ft (6.1 m), depth 150 ft (45.7 m), open hole.
DATUM.--Altitude of land-surface datum, 179.5 ft (54.71 m). Measuring point: Top edge of recorder shelf, 4.0 ft (1.22 m) above land-surface datum.
REMARKS.--
PERIOD OF RECORD.--June 1967 to August 1975 and current year beginning April 1977.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.63 ft (7.507 m) below land-surface datum, July 21, 1967; lowest water level, 27.72 ft (8.449 m) below land-surface datum, Oct. 5, 1968.
EXTREMES FOR CURRENT YEAR.--Highest water level, 26.24 ft (7.998 m) below land-surface datum, Apr. 22-23; lowest water level, 27.63 ft (8.422 m) below land-surface datum, July 18-19.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	---	---	27.00	26.85
10	---	---	---	---	---	---	---	---	---	---	27.11	27.00
15	---	---	---	---	---	---	---	---	---	27.20	26.79	27.34
20	---	---	---	---	---	---	---	---	---	27.40	26.83	27.15
25	---	---	---	---	---	---	---	---	---	27.45	26.50	26.75
EOM	---	---	---	---	---	---	---	---	---	27.41	26.75	26.50
MEAN	---	---	---	---	---	---	---	---	---	27.37	26.85	26.94

WTR YR 1977 MEAN 26.98 HIGH 26.24 APR 22 AND OTHERS LOW 27.46 JUL 19 AND OTHERS

NOTE.--No record Apr. 24-July 14.

MORRIS COUNTY

404639074230001. Local I.D., Briarwood School Obs.
LOCATION.--Lat 40°46'39", long 74°23'00", Hydrologic Unit 02030103, at the Briarwood School near Florham Park.
Owner: U.S. Geological Survey.
AQUIFER.--Stratified drift of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled semi-artesian observation well, diameter 6 in (152 mm), depth 110 ft (33.5 m), screened 100 to 110 ft (30.5 to 33.5 m).
DATUM.--Altitude of land-surface datum, 198 ft (60.4 m). Measuring point: Top edge of recorder shelf, 3.0 ft (0.91 m) above land-surface datum.
REMARKS.--
PERIOD OF RECORD.--March 1967 to May 1975 and current year beginning April 1977.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 34.17 ft (10.415 m) below land-surface datum, June 3, 1968; lowest water level, 50.58 ft (15.417 m) below land-surface datum, Sept. 29, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 45.91 ft (13.993 m) below land-surface datum, Apr.28, May 2; lowest water level, 50.58 ft (15.417 m) below land-surface datum, Sept. 29.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	46.07	47.60	48.16	49.24	49.88
10	---	---	---	---	---	---	---	46.46	47.72	48.52	49.40	49.96
15	---	---	---	---	---	---	---	46.68	47.74	48.53	49.52	50.40
20	---	---	---	---	---	---	46.18	46.93	47.97	48.74	49.57	50.38
25	---	---	---	---	---	---	46.22	47.08	47.88	48.86	49.76	50.42
EOM	---	---	---	---	---	---	46.05	47.54	48.19	49.11	49.85	50.50
MEAN	---	---	---	---	---	---	46.13	46.73	47.80	48.61	49.48	50.20

WTR YR 1977 MEAN 48.40 HIGH 46.00 MAY 2 LOW 50.55 SEP 29

OCEAN COUNTY

395714074223401. Local I.D., Crammer Obs.
LOCATION.--Lat 39°57'14" long 74°22'34", Hydrologic Unit 02040301, about 800 ft (244 m) east of Central Railroad of New Jersey, Whiting.
Owner: Mr. Frank Reynolds (formerly Mrs. William Crammer).
AQUIFER.--Cohansey Sand of Miocene(?) and Pliocene(?) Age.
WELL CHARACTERISTICS.--Unused water table well, diameter 8 in (203 mm), depth 69 ft (21.0 m), slotted steel casing gravel packed.
DATUM.--Altitude of land-surface datum is 179 ft (54.6 m). Measuring point: Top of 8-inch coupling, 0.9 ft (0.27 m) above land-surface datum.
REMARKS.--Originally a dug well in which casing was inserted on March 31, 1966.
PERIOD OF RECORD.--1952 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 47.80 ft (14.569 m) below land-surface datum, June 9-14, 20-29, 1973; lowest water level, well dry, November 1957 to February 1958, December 1965.
EXTREMES FOR CURRENT YEAR.--Highest water level, 54.21 ft (16.523 m) below land-surface datum, Oct. 18; lowest water level, 57.09 ft (17.401 m) below land-surface datum, Sept. 29-30.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	54.56	54.92	55.34	55.70	56.04	56.32	56.36	56.45	56.59	56.83	56.99
10	---	54.61	55.00	55.40	55.77	56.10	56.35	56.40	56.47	56.61	56.87	57.01
15	---	54.67	55.06	55.47	55.83	56.15	56.36	56.40	56.49	56.66	56.91	57.03
20	54.32	54.73	55.12	55.53	55.88	56.20	56.35	56.39	56.51	56.69	56.94	57.05
25	54.39	54.79	55.19	55.58	55.94	56.25	56.35	56.40	56.53	56.73	56.95	57.06
EOM	54.48	54.84	55.27	55.65	55.98	56.29	56.37	56.42	56.56	56.78	56.97	57.09
MEAN	54.38	54.67	55.06	55.47	55.82	56.15	56.34	56.39	56.49	56.66	56.90	57.02

WTR YR 1977 MEAN 56.02 HIGH 54.29 OCT 18 AND OTHERS LOW 57.09 SEP 29

NOTE.--No record Oct. 1-17.

OCEAN COUNTY

395930074142101. Local I.D., Toms River Chem 84 Obs.
LOCATION.--Lat 39°59'29", long 74°14'20", Hydrologic Unit 02040301, on the lands of Toms River Chemical Company, Dover Township.
Owner: Toms River Chemical Company.
AQUIFER.--Magothy-Raritan undifferentiated of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in (203 mm), depth 1,480 ft (451 m), screened 1,460 to 1,480 ft (445 to 451 m).
DATUM.--Altitude of land-surface datum, 66.7 ft (20.33 m). Measuring point: Top edge of recorder shelf, 2.7 ft (0.82 m) above land-surface datum.
REMARKS.--
PERIOD OF RECORD.--July 1968 to July 1975 and current year beginning March 1977.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 62.32 ft (18.995 m) below land-surface datum, July 19, 1968 and Feb. 9, 1969; lowest water level, 86.96 ft (26.505 m) below land-surface datum, Sept. 16, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 82.94 ft (25.280 m) below land-surface datum, Apr. 30; lowest water level, 86.96 ft (26.505 m) below land-surface datum, Sept. 16.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	83.08	83.96	84.75	85.50	86.11	86.56
10	---	---	---	---	---	---	83.60	84.02	84.74	85.69	86.19	86.54
15	---	---	---	---	---	---	83.63	84.31	85.01	85.68	86.18	86.69
20	---	---	---	---	---	---	83.89	84.48	85.02	85.76	86.24	86.71
25	---	---	---	---	---	83.09	83.69	84.57	85.21	85.84	86.38	86.81
EOM	---	---	---	---	---	83.17	84.05	84.75	85.34	86.03	86.55	86.87
MEAN	---	---	---	---	---	83.15	83.62	84.31	84.97	85.72	86.24	86.70

WTR YR 1977 MEAN 85.16 HIGH 82.98 MAR 23 LOW 86.92 SEP 16

OCEAN COUNTY

400416074270101. Local I.D., Colliers Mills TW 1 Obs.
LOCATION.--Lat 40°04'14", long 74°27'02", Hydrologic Unit 02040301, along western shore of Colliers Mills pond, Jackson Township.
Owner: U.S. Geological Survey.
AQUIFER.--Englishtown Sand of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 427 ft (130 m), screened 417 to 427 ft (127 to 130 m).
DATUM.--Altitude of land-surface datum, 136.5 ft (41.61m). Measuring point: Top of 6 inch coupling, 2.2 ft (0.67 m) above land-surface datum.
REMARKS.--Water-quality analysis appears elsewhere in this report.
PERIOD OF RECORD.--February 1964 to July 1975 and current year beginning March 1977.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 52.02 ft (15.856 m) below land-surface datum, Feb. 19, 1964; lowest water level, 71.69 ft (21.851 m) below land-surface datum, Sept. 15-16, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 70.09 ft (21.363 m) below land-surface datum, Apr. 5; lowest water level, 71.69 ft (21.851 m) below land-surface datum, Sept. 15-16.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	70.14	70.26	70.62	---	71.16	71.39
10	---	---	---	---	---	---	70.37	70.26	70.59	70.97	71.22	71.45
15	---	---	---	---	---	---	70.35	70.38	70.73	71.01	71.20	71.66
20	---	---	---	---	---	---	70.44	70.43	70.75	71.05	71.25	71.47
25	---	---	---	---	---	70.31	70.24	70.46	70.80	71.10	71.28	71.45
EOM	---	---	---	---	---	70.31	70.36	70.57	70.83	71.24	71.39	71.49
MEAN	---	---	---	---	---	70.32	70.33	70.38	70.70	71.06	71.23	71.49

WTR YR 1977 MEAN 70.83 HIGH 70.14 APR 5 AND OTHERS LOW 71.66 SEP 15

PASSAIC COUNTY

410209074170801. Local I.D., Haskell Obs.
LOCATION.--Lat 41°02'09", long 74°17'08", Hydrologic Unit 02030103, at well field at north end of 4th Avenue, Wanaque.
Owner: Wanaque Water Department.
AQUIFER.--Glacial Till of Pleistocene Age.
WELL CHARACTERISTICS.--Dug unused water table well, diameter 16 ft (4.9 m), depth 26 ft (7.9 m).
DATUM.--Altitude of land-surface datum, 260.5 ft (79.40 m). Measuring point: Top edge of concrete pump base, 2.2 ft (0.67 m) above land-surface datum.
REMARKS.--
PERIOD OF RECORD.--May 1965 to August 1970 and current year beginning April 1977.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.92 ft (1.500 m) below land-surface datum, Mar. 31, 1967; lowest water level, 16.01 ft (4.880 m) below land-surface datum, Aug. 30, 1965.
EXTREMES FOR CURRENT YEAR.--Highest water level, 6.41 ft (1.954 m) below land-surface datum, Sept. 27; lowest water level, 11.01 ft (3.356 m) below land-surface datum, May 31.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	7.06	7.81	7.58	8.08	7.73
10	---	---	---	---	---	---	---	6.76	7.18	7.64	8.19	7.75
15	---	---	---	---	---	---	---	7.02	7.33	7.60	7.67	7.84
20	---	---	---	---	---	---	---	7.31	7.43	9.12	7.66	7.70
25	---	---	---	---	---	---	---	7.43	7.49	9.04	7.69	7.22
EOM	---	---	---	---	---	---	6.89	10.93	7.53	8.61	7.74	7.08
MEAN	---	---	---	---	---	---	6.84	7.57	7.61	8.27	7.93	7.56

WTR YR 1977 MEAN 7.77 HIGH 6.52 SEP 27 LOW 10.93 MAY 31

UNION COUNTY

404027074164401. Local I.D., White Lab. 3 Obs.

LOCATION.--Lat 40°40'27", long 74°16'44", Hydrologic Unit 02030104, at north end of South 31st Street, Kenilworth. Owner: Schering Corporation.

AQUIFER.--Brunswick Shale of Late Triassic Age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in (203 mm), cased to approximately 40 ft (12.2 m), depth 251 ft (76.5 m), open hole.

DATUM.--Altitude of land-surface datum, 85.2 ft (25.97 m). Measuring point: Top edge of recorder shelf at land-surface datum.

REMARKS.--Land-surface datum prior to February 1974, 4.2 ft (1.28 m) lower.

PERIOD OF RECORD.--1952 to current year, records revised 1974 to 1976 water years.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.51 ft (3.203 m) below land-surface datum, Apr. 17, 1961; lowest water level, 46.10 ft (14.051 m) below land-surface datum, Mar. 7, 1952.

EXTREMES FOR CURRENT YEAR.--Highest water level, 24.44 ft (7.449 m) below land-surface datum, June 2; lowest water level, 30.48 ft (9.290 m) below land-surface datum, Sept. 29.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.30	26.40	25.57	27.04	27.98	29.54	27.47	26.43	24.45	27.94	29.26	28.27
10	25.26	27.36	26.56	27.52	28.88	29.04	27.71	25.32	27.49	25.98	29.14	28.26
15	25.64	26.63	26.69	26.73	28.53	28.88	28.16	25.05	28.06	26.97	28.19	29.39
20	26.02	26.91	26.26	28.07	27.86	28.78	26.28	25.69	26.01	27.61	28.88	29.32
25	24.83	26.07	26.04	28.54	29.42	27.61	27.23	26.29	26.54	26.70	29.13	29.64
EOM	26.67	26.02	26.05	27.99	29.42	27.56	27.65	25.35	26.83	27.71	29.71	30.42
MEAN	25.84	26.56	26.44	27.48	28.46	28.32	27.42	26.06	26.39	27.38	28.88	29.23

WTR YR 1977 MEAN 27.36 HIGH 24.77 JUN 2 LOW 30.42 SEP 30

GROUND-WATER QUALITY

(Aquifer code disignations and column heading explanations are listed on p. 487)

ATLANTIC COUNTY

LOCAL IDENT-I-FIER	LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	GEO-LOGIC UNIT	DATE OF SAMPLE	TIME	TEMPER-ATURE (DEG C)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
NJWC-ATL CO-DORHS AVE	39 15 05	074 36 31	01	121CNSY	77-07-20	1120	15.8	106	5.1	17
NJWC-ATL CO- 2 -5TH ST	39 15 08	074 36 02	01	121CNSY	77-07-20	1100	14.3	101	5.7	17
NJWC-ATL CO-GROVELAND	39 19 24	074 35 49	01	121CNSY	77-07-20	1050	12.8	391	--	110
NJWC-ATL CO-KIRKLIN AVE	39 20 01	074 35 22	01	121CNSY	77-07-20	1025	14.0	118	5.3	18
VENTNOR CITY WD 7	39 20 32	074 28 59	01	122KRKDL	77-07-20	1330	--	172	7.7	6.6
NJWC-ATL CO-OAK AVE	39 21 19	074 34 24	01	121CNSY	77-07-20	1010	13.5	134	5.0	19
MARLBOROUGH-BLENHEIM 3	39 21 23	074 26 00	01	122KRKD	77-07-20	1415	19.3	426	7.9	54
CHALFONTE HOTEL-NEW	39 21 32	074 26 22	01	122KRKD	77-07-20	1435	19.2	199	7.8	11
NJWC-ATL CO-MILL ROAD	39 21 58	074 33 17	01	121CNSY	77-07-20	0945	13.9	122	5.2	14
NJWC-ATL CO-WOODLAND AVE	39 23 33	074 31 44	01	121CNSY	77-07-20	1220	13.1	66	5.3	10
BRIGANTINE CITY WD 2-29	39 24 56	074 21 20	01	122KRKD	77-07-20	1510	19.1	81	7.3	3.3
NJWC-ATL CO-ABSECON 1	39 25 51	074 30 23	01	121CNSY	77-07-20	1200	13.0	50	4.9	7.9

LOCAL IDENT-I-FIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL)	TOTAL DEPTH OF HOLE (FT. BELOW LSD)	TOTAL DEPTH OF WELL (FT)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH TO BOT-TOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	INSTAN-TANEOUS FLOW RATE (GPM)
NJWC-ATL CO-DORHS AVE	77-07-20	20.00	--	99	--	--	79	99	1440	450
NJWC-ATL CO- 2 -5TH ST	77-07-20	32.00	--	118	--	--	78	118	1440	450
NJWC-ATL CO-GROVELAND	77-07-20	19.00	188	159	127	159	129	159	10	700
NJWC-ATL CO-KIRKLIN AVE	77-07-20	20.00	--	71	--	--	56	71	1440	300
VENTNOR CITY WD 7	77-07-20	8.00	--	830	--	--	800	830	720	500
NJWC-ATL CO-OAK AVE	77-07-20	15.00	--	165	--	--	96	165	10	700
MARLBOROUGH-BLENHEIM 3	77-07-20	5.00	838	823	--	--	765	823	1440	300
CHALFONTE HOTEL-NEW	77-07-20	8.00	--	844	--	--	797	837	10	230
NJWC-ATL CO-MILL ROAD	77-07-20	20.00	--	152	--	--	117	152	1440	700
NJWC-ATL CO-WOODLAND AVE	77-07-20	50.00	--	157	--	--	--	--	240	700
BRIGANTINE CITY WD 2-29	77-07-20	12.00	788	778	--	--	718	778	120	700
NJWC-ATL CO-ABSECON 1	77-07-20	30.00	263	205	180	204	177	205	180	700

CAPE MAY COUNTY

LOCAL IDENT-I-FIER	LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	GEO-LOGIC UNIT	DATE OF SAMPLE	TIME	TEMPER-ATURE (DEG C)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
US COAST GUARD 1	38 56 50	074 53 11	01	121CNSY	77-08-31	1110	15.6	396	7.5	45
WILDWOOD WD PINE 2	38 59 32	074 48 51	02	121CNSY	77-09-01	0855	15.5	694	7.4	120
STONE HARBOR WD 4	39 03 01	074 45 45	01	122KRKDL	77-09-01	1000	20.2	359	8.5	31
AVALON BORO WD 6-68	39 05 28	074 43 38	01	122KRKDL	77-09-01	1045	20.1	385	8.4	46
AVACON BORO WD 8-76	39 05 45	074 43 26	01	122KRKDL	77-09-01	1055	19.6	253	8.3	13
SEA ISLE CITY WD 2	39 05 26	074 41 31	01	122KRKDL	77-09-01	1150	19.4	263	8.2	14
ARAMINGO W.C.1	39 11 52	074 39 27	01	122KRKDL	77-09-01	1220	19.6	237	7.9	14
NJWC-OCEAN CITY DIST 7	39 13 43	074 37 55	01	122KRKDL	77-09-01	1335	19.5	219	7.6	12
NJWC-OCEAN CITY DIST 11	39 17 26	074 33 52	01	122KRKDL	77-09-01	1400	19.2	184	7.6	7.2

LOCAL IDENT-I-FIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL)	TOTAL DEPTH OF HOLE (FT. BELOW LSD)	TOTAL DEPTH OF WELL (FT)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH TO BOT-TOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	INSTAN-TANEOUS FLOW RATE (GPM)
US COAST GUARD 1	77-08-31	11.00	332	332	279	324	292	322	10	750
WILDWOOD WD PINE 2	77-09-01	10.00	364	364	--	--	304	354	10	280
STONE HARBOR WD 4	77-09-01	10.00	965	880	820	952	830	880	180	780
AVALON BORO WD 6-68	77-09-01	10.00	950	922	870	--	880	920	10	750
AVACON BORO WD 8-76	77-09-01	8.00	982	839	777	840	784	839	15	750
SEA ISLE CITY WD 2	77-09-01	7.00	864	864	--	--	744	861	15	500
ARAMINGO W.C.1	77-09-01	7.00	834	834	--	--	802	834	10	140
NJWC-OCEAN CITY DIST 7	77-09-01	8.00	810	810	--	--	760	810	10	850
NJWC-OCEAN CITY DIST 11	77-09-01	10.00	--	797	--	--	747	797	240	650

GROUND-WATER QUALITY

MIDDLESEX COUNTY

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	TIME	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	DISSOLVED CHLORIDE (CL) (MG/L)
MADISON TWP MUA-BRNTWN 2	40 23 45	074 18 38	01	2110DBG	77-01-05	1445	12.1	82	--	2.7
PERTH AMBOY WW 3	40 25 35	074 20 14	01	2110DBG	77-08-18	1045	12.6	241	6.9	31
PERTH AMBOY WW 4	40 25 36	074 20 12	02	211MGRR	77-04-06	0930	12.7	287	--	51
				2110DBG	77-08-18	1058	12.1	461	4.7	55
PERTH AMBOY WW 5	40 25 37	074 20 02	01	2110DAG	77-08-18	1110	12.5	212	4.4	12
PERTH AMBOY WW 1A	40 25 37	074 20 20	01	211FRNG	77-04-06	0840	12.2	62	--	4.8
				211FRNG	77-08-18	1127	12.4	61	6.0	6.3
PERTH AMBOY WW 2	40 25 43	074 20 10	01	211FRNG	77-04-06	0855	12.0	88	--	9.0
				211FRNG	77-07-06	1430	12.3	233	--	49
				211FRNG	77-08-18	1118	12.4	201	6.0	42
SOUTH RIVER BORO WD 2	40 25 56	074 21 41	01	211FRNG	77-08-18	0918	12.0	49	6.5	7.2
SOUTH RIVER BORO WD 4-75	40 25 57	074 21 38	02	211FRNG	77-08-18	0925	12.4	55	6.3	6.1
SOUTH RIVER BORO WD 5-77	40 25 59	074 21 42	02	211FRNG	77-08-31	0855	12.2	52	5.8	7.0
SAYREVILLE BORO WD 8	40 26 04	074 20 04	01	2110DBG	77-04-06	1145	13.4	314	--	63
				2110DBG	77-09-30	1400	14.6	545	4.1	130
SAYREVILLE BORO WD M	40 26 09	074 19 52	01	211FRNG	77-09-30	1500	11.9	391	6.7	100
SAYREVILLE BORO WD A	40 26 14	074 19 50	01	2110DAG	77-09-30	1345	12.6	431	4.2	85
SAYREVILLE BORO WD I	40 26 26	074 19 36	01	2110DBG	77-04-06	1140	11.5	142	--	13
				2110DBG	77-09-30	1340	12.2	147	4.6	12
HERCULES POWDER CO 5	40 26 38	074 20 22	01	211FRNG	77-07-06	1345	--	4180	--	950
THOMAS AND CHADWICK 1	40 26 47	074 22 27	01	211FRNG	77-09-29	1300	--	78	--	16
HERCULES POWDER CO 3	40 26 49	074 20 25	01	211FRNG	77-07-06	1240	--	3550	--	850
HERCULES POWDER CO 2	40 26 59	074 20 20	01	211FRNG	77-07-06	1130	--	1890	--	370
MADISON TWP MUA-L HRBR 1	40 27 00	074 14 59	01	2110DAG	77-01-05	1415	12.2	69	--	3.9
				2110DBG	77-08-18	1505	12.4	70	5.1	4.2
MADISON TWP MUA-L HRBR 2	40 27 00	074 14 59	02	211FRNG	77-08-18	1520	13.3	49	6.2	3.3
EI DUPONT-PARLIN 8A	40 27 03	074 18 59	02	2110DBG	77-09-30	1015	12.5	186	4.4	17
HERCULES POWDER CO 1R	40 27 05	074 20 23	01	211FRNG	77-07-06	1025	--	1050	--	200
EI DUPONT-PARLIN 6	40 27 01	074 19 17	01	211FRNG	77-09-30	1010	11.9	45	6.4	1.1
EI DUPONT-PARLIN 5	40 27 10	074 19 10	01	211FRNG	77-09-30	1020	13.3	208	4.5	17
EI DUPONT-PARLIN 1-3A	40 27 15	074 19 24	01	211FRNG	77-04-06	1315	12.6	74	--	6.0
				211FRNG	77-09-30	1040	12.8	64	6.6	7.5
EI DUPONT-PARLIN 3-3C	40 27 15	074 19 32	01	211FRNG	77-09-30	1035	13.2	357	6.4	47
SAYREVILLE BORO WD P	40 27 44	074 16 28	01	211FRNG	77-09-30	1245	12.4	47	6.6	2.2
SAYREVILLE BORO WD Q-73	40 27 45	074 16 31	01	2110DAG	77-01-04	1115	11.9	50	--	4.0
				2110DBG	77-09-30	1250	12.2	175	4.8	16
SOUTH AMBOY CITY WD 8	40 28 22	074 16 30	01	211FRNG	76-11-16	1245	12.9	55	6.0	4.2
SOUTH AMBOY CITY WD 9	40 28 24	074 16 31	01	2110DBG	76-11-16	1300	11.8	145	4.5	15
				2110DAG	77-08-18	1315	12.2	151	4.7	15
SOUTH AMBOY CITY WD 10	40 28 25	074 16 32	01	2110DAG	77-01-04	1620	12.5	196	--	17

LOCAL IDENT- I- FIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL)	TOTAL DEPTH OF HOLE (FT. BELOW LSD)	TOTAL DEPTH OF WELL (FT)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH TO BOT-TOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	INSTAN-TANEOUS FLOW RATE (GPM)
MADISON TWP MUA-BRNTWN 2	77-01-05	95.00	--	250	--	--	190	250	20	--
PERTH AMBOY WW 3	77-08-18	15.00	80	68	46	68	48	68	8	700
PERTH AMBOY WW 4	77-04-06	15.00	69	66	33	66	51	66	10	750
	77-08-18	15.00	69	66	33	66	51	65	8	750
PERTH AMBOY WW 5	77-08-18	15.00	--	80	50	--	50	80	8	420
PERTH AMBOY WW 1A	77-04-06	20.00	278	261	194	267	201	261	1440	1200
	77-08-18	20.00	278	261	194	267	201	261	1440	1200
PERTH AMBOY WW 2	77-04-06	20.00	--	260	205	--	205	260	10	700
	77-07-06	20.00	--	260	205	--	205	260	10	700
	77-08-18	20.00	--	260	205	--	205	260	1440	700
SOUTH RIVER BORO WD 2	77-08-18	20.00	--	198	172	198	173	198	240	1000
SOUTH RIVER BORO WD 4-75	77-08-18	20.00	207	179	150	178	149	179	15	500
SOUTH RIVER BORO WD 5-77	77-08-31	20.00	208	187	116	181	132	182	--	1000
SAYREVILLE BORO WD B	77-04-06	27.00	--	81	--	--	71	81	720	1000
	77-09-30	27.00	--	81	--	--	71	81	360	1000
SAYREVILLE BORO WD M	77-09-30	30.00	--	280	--	--	225	278	1440	1200
SAYREVILLE BORO WD A	77-09-30	30.00	--	82	--	--	72	82	360	350
SAYREVILLE BORO WD I	77-04-06	58.00	109	99	65	93	83	94	720	800
	77-09-30	58.00	109	99	65	93	83	94	1440	800
HERCULES POWDER CO 5	77-07-06	48.00	237	228	185	237	183	228	60	1040
THOMAS AND CHADWICK 1	77-09-29	21.00	--	195	--	--	167	195	15	10
HERCULES POWDER CO 3	77-07-06	45.00	241	220	173	227	180	220	55	1070
HERCULES POWDER CO 2	77-07-06	52.00	322	237	178	235	184	237	60	1000
MADISON TWP MUA-L HRBR 1	77-01-05	60.00	--	218	185	--	193	213	10	350
	77-08-18	60.00	--	218	185	--	193	213	50	350
MADISON TWP MUA-L HRBR 2	77-08-18	60.00	400	400	355	397	360	395	10	350
EI DUPONT-PARLIN 8A	77-09-30	93.00	116	116	39	111	97	116	1440	220
HERCULES POWDER CO 1B	77-07-06	59.00	293	225	163	235	170	225	60	800
EI DUPONT-PARLIN 6	77-09-30	102.00	370	325	246	318	253	314	15	900
EI DUPONT-PARLIN 5	77-09-30	118.00	312	309	251	308	257	305	30	1000
EI DUPONT-PARLIN 1-3A	77-04-06	104.00	310	286	228	291	237	286	45	500
	77-09-30	104.00	310	286	228	291	237	286	55	425
EI DUPONT-PARLIN 3-3C	77-09-30	91.00	295	284	248	291	246	284	10	800
SAYREVILLE BORO WD P	77-09-30	40.00	--	288	--	--	254	288	1440	1150
SAYREVILLE BORO WD Q-73	77-01-04	40.00	140	136	76	138	78	136	20	350
	77-09-30	40.00	140	136	76	138	78	136	10	350
SOUTH AMBOY CITY WD 8	76-11-16	10.00	241	237	198	233	210	234	180	650
SOUTH AMBOY CITY WD 9	76-11-16	10.00	--	48	--	--	33	48	10	400
	77-08-18	10.00	--	48	--	--	33	48	35	400
SOUTH AMBOY CITY WD 10	77-01-04	10.00	49	49	31	--	39	49	10	450

MIDDLESEX COUNTY--Continued

LOCAL IDENT-I-FIER	LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	GEO-LOGIC UNIT	DATE OF SAMPLE	TIME	TEMPER-ATURE (DEG C)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
SOUTH AMBOY CITY WD 10	40 28 25	074 16 32	01	211ODBG	77-08-18	1310	12.8	220	4.1	18
NATIONAL LEAD CO 4	40 28 31	074 18 15	01	211FRNG	77-04-06	1020	11.6	86	--	4.7
NATIONAL LEAD CO 3	40 28 42	074 18 11	01	211FRNG	77-04-06	1030	11.8	122	--	7.6
JERSEY CENT P&L-WERNER 7	40 29 23	074 16 51	01	211FRNG	76-11-16	1400	13.0	1340	5.8	377
				211FRNG	77-09-29	1445	13.7	2800	6.3	710
DUHERNAL WC OBS 60-F	40 27 29	074 19 38	01	211FRNG	77-04-06	1305	15.2	1930	--	535
				211FRNG	77-09-30	0940	15.4	2410	6.3	680
CARBORUNDUM CO 1	40 30 46	074 18 27	01	211FRNG	76-11-16	1145	13.0	292	6.5	13
				211FRNG	77-09-29	1120	13.1	298	7.3	12
CHEVRON OIL CO 2	40 32 00	074 16 20	01	211FRNG	76-11-16	1045	12.7	308	6.3	8.7
				211FRNG	77-09-29	1035	13.0	362	7.1	9.2
SWIFT AND CO 1	40 32 33	074 16 33	01	211FRNG	76-11-16	0920	12.7	712	4.8	82
				211FRNG	77-09-29	0900	12.3	1300	4.9	240
AMER CYANIMID CO 2A	40 32 36	074 16 16	01	211FRNG	76-11-16	1000	14.1	736	6.1	76
				211FRNG	77-09-29	0940	14.1	898	6.5	110

LOCAL IDENT-I-FIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL)	TOTAL DEPTH OF HOLE (FT. BELOW LSD)	TOTAL DEPTH OF WELL (FT)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH TO BOT-TOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	INSTAN-TANEOUS FLOW RATE (GPM)
SOUTH AMBOY CITY WD 10	77-08-18	10.00	49	49	31	--	39	49	30	425
NATIONAL LEAD CO 4	77-04-06	109.00	--	251	--	--	220	251	10	700
NATIONAL LEAD CO 3	77-04-06	120.00	--	270	--	--	240	270	10	700
JERSEY CENT P&L-WERNER 7	76-11-16	10.00	230	165	127	166	135	165	180	300
	77-09-29	10.00	230	165	127	166	135	165	30	300
DUHERNAL WC OBS 60-F	77-04-06	149.00	288	287	267	--	282	287	240	90
	77-09-30	149.00	288	287	267	--	282	287	75	90
CARBORUNDUM CO 1	76-11-16	15.00	76	71	36	69	57	67	15	500
	77-09-29	15.00	76	71	36	69	57	67	10	500
CHEVRON OIL CO 2	76-11-16	45.00	--	106	--	--	96	106	1440	180
	77-09-29	45.00	--	106	--	--	96	106	1440	180
SWIFT AND CO 1	76-11-16	30.00	59	59	--	--	39	59	360	140
	77-09-29	30.00	59	59	--	--	39	59	300	120
AMER CYANIMID CO 2A	76-11-16	9.00	--	60	--	--	45	60	360	120
	77-09-29	9.00	--	60	--	--	45	60	120	120

LOCAL IDENT- I- FIER	LAT- I- TUDE	LONG- I- TUDE	SEQ. NO.	GEO- LOGIC UNIT	DATE OF SAMPLE	TIME	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
BRIELLE BORO WD 1	40 06 44	074 03 44	01	122KRKD	77-07-27	1045	12.8	68	6.2	8.0
MANASQUAN BORO WD 6	40 07 10	074 03 29	02	122KRKD	77-07-27	1150	12.5	56	4.9	9.5
MANASQUAN BORO WD 3	40 07 12	074 03 28	01	122KRKD	77-07-27	1140	13.1	97	4.6	14
MANASQUAN BORO WD 2R	40 07 12	074 03 28	02	122KRKD	77-07-27	1110	13.2	92	4.8	14
MANASQUAN BORO WD 1R	40 07 13	074 03 29	01	122KRKD	77-07-27	1120	13.0	66	5.1	11
MANASQUAN BORO WD 5	40 07 14	074 03 29	01	122KRKD	77-07-27	1130	12.7	69	5.0	11
SEA GIRT BORO WD 6	40 08 01	074 02 31	01	122KRKD	77-07-27	1305	13.6	71	6.2	11
SEA GIRT BORO WD 2	40 08 02	074 02 28	01	122KRKD	77-07-27	1330	13.5	61	6.3	9.8
SEA GIRT BORO WD 5	40 08 04	074 02 27	01	211EGLS	77-07-27	1320	19.0	198	7.8	.5
SPRING LAKE BORO WD 1	40 08 49	074 02 07	01	211EGLS	77-07-27	1400	19.0	193	7.8	.6
SPRING LAKE BORO WD 4	40 09 52	074 01 49	01	211EGLS	77-07-27	1425	18.8	192	7.7	1.2
BELMAR BORO WD 2-ELEC	40 10 38	074 01 46	02	211EGLS	77-07-28	1010	17.7	231	8.0	2.8
AVON-BY-THE-SEA WD 4	40 11 37	074 01 21	02	211MGRW	77-07-28	1100	23.7	98	6.7	2.0
AVON-BY-THE-SEA WD 1	40 11 38	074 01 25	01	211MLRW	77-07-28	1110	17.1	256	8.0	2.8
MON CON WC-OCEAN GR 21	40 12 16	074 01 08	01	211MLRW	77-07-28	1345	16.5	256	8.0	3.5
ALLENHURST BORO WD 4	40 14 01	074 00 25	01	211EGLS	77-07-28	1200	18.1	220	7.6	2.2
RED BANK BORO WD 1R-50	40 20 47	074 04 20	01	211MGRW	77-08-03	1030	17.0	79	6.9	7.2
KEANSBURG BORO WD 4	40 26 21	074 07 38	01	211ODBG	76-10-20	1250	13.3	52	6.2	3.4
				211ODBG	77-08-31	1250	13.5	50	6.2	2.0
MATAWAN TWP MUA 3	40 23 59	074 12 35	01	211ODBG	77-01-05	1735	12.9	38	--	2.3
HIGHLANDS BORO WD 4-73	40 24 01	073 59 20	01	211MGRW	77-08-03	1150	19.6	70	7.2	2.4
MATAWAN BORO WD 2	40 24 27	074 13 48	01	211ODBG	76-10-21	0955	13.1	70	6.1	4.3
				211ODBG	77-01-04	1355	12.9	81	--	2.8
ATL HIGHLANDS BORO WD 1	40 24 37	074 02 36	01	211ODBG	77-01-13	1320	15.9	63	--	3.1
ATL HIGHLANDS BORO WD 3	40 24 41	074 02 33	01	211MGRW	77-01-13	1345	13.6	150	--	6.0
				211MGRW	77-08-31	1505	16.3	68	6.6	.2
ATL HIGHLANDS BORO WD 2	40 24 41	074 02 34	01	211EGLS	77-01-13	1400	13.0	170	--	6.6
				211EGLS	77-08-31	1520	13.7	177	6.7	6.0
W KEANSBURG WC-HOLMDEL 4	40 24 43	074 10 10	01	211FRNG	76-10-20	1115	15.4	63	6.2	4.3
				211FRNG	77-08-31	1035	15.8	58	6.3	.4
W KEANSBURG WC-HOLMDEL 3	40 24 45	074 10 19	01	211ODBG	77-01-06	1435	13.5	45	--	.4
				211ODBG	77-08-31	1030	14.0	41	6.2	2.8
ENGH PRECISION CAST CO	40 25 00	074 08 11	01	211ODBG	77-01-13	0946	13.6	52	--	2.1
MATAWAN BORO WD 3	40 25 15	074 14 50	01	211ODBG	76-10-21	1030	12.8	59	6.1	6.2
				211ODBG	77-01-05	1310	12.4	55	--	4.4
				211ODBG	77-09-01	1005	12.6	55	5.7	3.9
KEANSBURG BORO WD 5	40 26 21	074 07 43	01	211ODBG	76-10-20	1215	13.6	51	6.2	4.0
				211ODBG	77-01-07	0355	13.4	44	--	1.8
				211ODBG	77-08-31	1235	13.9	52	6.2	4.0
W KEANSBURG WC-HAZLET 1	40 25 33	074 09 32	01	211ODBG	76-10-20	1040	13.5	44	6.1	3.3

MONMOUTH COUNTY--Continued

LOCAL IDENT-I-FIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL)	TOTAL DEPTH OF HOLE (FT. BELOW LSD)	TOTAL DEPTH OF WELL (FT)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH TO BOT-TOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	INSTAN-TANEOUS FLOW RATE (GPM)
BRIELLE BORO WD 1	77-07-27	33.00	154	153	129	150	130	150	30	400
MANASQUAN BORO WD 6	77-07-27	10.00	--	180	--	--	--	180	40	500
MANASQUAN BORO WD 3	77-07-27	15.00	--	118	--	--	--	--	30	250
MANASQUAN BORO WD 2R	77-07-27	21.00	122	118	102	118	103	118	300	500
MANASQUAN BORO WD 1R	77-07-27	15.00	124	116	85	116	98	116	180	485
MANASQUAN BORO WD 5	77-07-27	15.00	118	117	94	117	97	117	20	900
SEA GIRT BORO WD 6	77-07-27	21.00	--	130	--	--	80	130	420	380
SEA GIRT BORO WD 2	77-07-27	21.00	--	159	--	--	--	--	25	400
SEA GIRT BORO WD 5	77-07-27	20.00	--	710	660	--	660	710	120	380
SPRING LAKE BORO WD 1	77-07-27	15.00	750	711	623	707	631	711	300	440
SPRING LAKE BORO WD 4	77-07-27	10.00	675	675	--	--	600	670	210	500
BELMAR BORO WD 2-ELEC	77-07-28	20.00	--	581	--	--	--	--	120	150
AVON-BY-THE-SEA WD 4	77-07-28	29.00	1302	1170	1077	1199	1105	1165	240	500
AVON-BY-THE-SEA WD 1	77-07-28	28.00	516	508	401	503	424	504	15	350
MON CON WC-OCEAN GR 21	77-07-28	20.00	456	430	380	436	395	430	10	300
ALLENHURST BORO WD 4	77-07-28	10.00	590	570	505	567	525	565	10	500
RED BANK BORO WD 18-50	77-08-03	40.00	702	692	632	688	637	687	360	1000
KEANSBURG BORO WD 4	76-10-20	10.00	356	351	258	342	280	340	10	1000
	77-08-31	10.00	356	351	258	342	280	340	10	950
MATAWAN TWP MUA 3	77-01-05	94.00	453	425	345	425	345	425	35	--
HIGHLANDS BORO WD 4-73	77-08-03	20.00	680	680	637	--	630	680	1440	700
MATAWAN BORO WD 2	76-10-21	20.00	276	258	204	258	228	258	15	300
	77-01-04	20.00	276	258	204	258	228	258	30	300
ATL HIGHLANDS BORO WD 1	77-01-13	20.00	662	593	520	583	519	582	10	--
ATL HIGHLANDS BORO WD 3	77-01-13	20.00	581	576	529	564	547	572	18	--
	77-08-31	20.00	581	576	529	564	547	572	15	540
ATL HIGHLANDS BORO WD 2	77-01-13	15.00	--	200	--	--	180	200	10	--
	77-08-31	15.00	--	200	--	--	180	200	30	130
W KEANSBURG WC-HOLMDEL 4	76-10-20	65.00	690	690	629	--	635	690	1440	1000
	77-08-31	65.00	690	690	629	--	635	690	1440	1000
W KEANSBURG WC-HOLMDEL 3	77-01-06	73.00	430	430	--	--	400	430	10	1000
	77-08-31	73.00	430	430	--	--	400	430	1440	1000
ENGR PRECISION CAST CO	77-01-13	20.00	--	364	--	--	354	364	6	--
MATAWAN BORO WD 3	76-10-21	90.00	--	271	220	273	231	271	210	750
	77-01-05	90.00	--	271	220	273	231	271	720	750
	77-09-01	90.00	--	271	220	273	231	271	200	380
KEANSBURG BORO WD 5	76-10-20	10.00	352	350	249	352	290	350	1440	1200
	77-01-07	10.00	352	350	249	352	290	350	10	1200
	77-08-31	10.00	352	350	249	352	290	350	1440	1100
W KEANSBURG WC-HAZLET 1	76-10-20	59.00	--	367	--	--	327	366	10	1000

LOCAL IDENT- I- FIER	LAT- I- TUDE	LONG- I- TUDE	SEQ. NO.	GEO- LOGIC UNIT	DATE OF SAMPLE	TIME	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
W KEANSBURG WC-HAZLET 1	40 25 33	074 09 32	01	2110DBG	77-01-06	1340	13.4	29	--	1.8
				2110DBG	77-08-31	1000	13.6	44	6.2	3.0
KEANSBURG WC-HAZLET 2	40 25 34	074 09 30	01	2110DBG	76-10-20	1050	13.4	47	6.1	2.4
				2110DBG	77-08-31	1005	13.6	45	6.2	2.0
KEYPORT BORO WD 7	40 25 35	074 12 14	01	2110DBG	76-10-20	1000	13.4	53	6.3	2.6
SANDY HOOK SP OBS 1	40 25 36	073 59 05	01	211MGRR	77-09-07	1430	15.5	158	7.1	2.2
KERR GLASS CO	40 25 42	074 12 20	01	2110DBG	77-01-05	1020	13.3	34	--	2.0
MATAWAN BORO WD 1	40 24 27	074 13 45	01	2110DBG	76-10-21	0940	14.0	71	6.0	3.3
				2110DBG	77-09-01	0955	13.4	72	6.0	.7
SEA COAST PRODUCTS 1	40 26 12	074 05 11	01	2110DBG	77-03-31	1410	15.0	72	--	6.3
				2110DBG	77-08-31	1425	15.0	80	6.4	9.3
LEX LUCAS	40 26 15	074 10 55	01	2110DBG	77-04-20	1000	13.0	67	--	3.1
MATAWAN TWP WD-LAYNE 2	40 26 04	074 14 17	01	211FRNG	76-10-21	1130	13.7	49	6.3	5.5
				211FRNG	77-09-01	1200	14.0	49	6.1	2.9
KEANSBURG BORO WD 6-68	40 26 20	074 07 42	01	2110DBG	76-10-20	1220	13.4	54	6.1	3.6
				2110DBG	77-08-31	1240	13.7	55	6.2	4.6
KEYPORT BORO WD 5	40 26 24	074 11 45	01	2110DBG	76-10-20	0920	13.4	155	6.5	9.0
KEYPORT BORO WD 4	40 26 26	074 11 42	04	2110DBG	77-03-30	1550	13.1	69	--	7.3
KEANSBURG BORO WD 3	40 26 28	074 07 44	01	2110DBG	76-10-20	1255	13.4	49	6.2	3.3
				2110DBG	77-01-07	0415	13.3	47	--	2.0
				2110DBG	77-08-31	1305	13.6	50	6.1	.4
INFERN-O-THERM CO	40 26 30	074 11 29	01	2110DBG	77-03-31	1325	13.5	391	--	98
UNION BEACH BORO WD 1-62	40 26 32	074 10 49	01	2110DBG	76-10-21	0850	13.0	716	5.9	194
				2110DBG	77-01-06	1110	13.0	1000	--	198
				2110DBG	77-03-30	1035	13.4	842	--	224
				2110DBG	77-04-20	1020	13.0	843	--	232
				2110DBG	77-08-15	1155	13.2	1040	--	260
				2110DBG	77-09-01	1055	13.7	1020	5.9	250
UNION BEACH BORO WD 3-77	40 26 32	074 10 51	02	211FRNG	77-09-01	1245	14.5	61	6.3	4.3
UNION BEACH BORO WD 2-69	40 26 34	074 10 52	01	2110DBG	76-10-21	0845	--	1410	--	401
				2110DBG	77-03-30	1345	13.5	2390	--	660
INT FLAVOR FRAG 2	40 26 41	074 09 11	01	2110DBG	76-10-20	1450	13.9	45	6.1	3.3
				2110DBG	77-01-06	1030	13.0	44	--	2.2
				2110DBG	77-09-01	0905	13.9	45	6.2	.2
INT FLAVOR FRAG 1	40 26 41	074 09 19	01	2110DBG	76-10-20	1420	13.5	47	6.1	2.3
				2110DBG	77-01-06	1040	13.4	45	--	2.8
				2110DBG	77-09-01	0857	13.6	45	6.3	1.0
NPS-SANDY HOOK 5A-70	40 27 05	073 59 59	02	211MGRR	77-09-01	1400	19.3	101	6.6	7.0
NPS-SANDY HOOK 4	40 27 06	073 59 52	01	211MGRR	77-09-01	1428	15.6	242	6.6	42

MONMOUTH COUNTY--Continued

LOCAL IDENT- I- FIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL)	TOTAL DEPTH OF HOLE (FT. BELOW LSD)	TOTAL DEPTH OF WELL (FT)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH TO BOT-TOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	INSTAN-TANEOUS FLOW RATE (GPM)
W KEANSBURG WC-HAZLET 1	77-01-06	59.00	--	367	--	--	327	366	800	1000
	77-08-31	59.00	--	367	--	--	327	366	60	1000
W KEANSBURG WC-HAZLET 2	76-10-20	44.00	--	352	--	--	312	352	20	1000
	77-08-31	44.00	--	352	--	--	312	352	65	1000
KEYPORT BORO WD 7	76-10-20	40.00	--	365	--	--	--	--	--	--
SANDY HOOK SP OBS 1	77-09-07	11.00	--	397	--	--	--	--	270	14
KERR GLASS CO	77-01-05	20.00	316	315	175	315	285	315	5	--
MATAWAN BORO WD 1	76-10-21	20.00	268	235	214	259	210	235	150	380
	77-09-01	20.00	268	235	214	259	210	235	175	340
SEA COAST PRODUCTS 1	77-03-31	10.00	--	420	--	--	--	--	240	650
	77-08-31	10.00	--	420	--	--	--	--	--	--
LEX LUCAS	77-04-20	20.00	--	282	--	--	250	282	55	100
MATAWAN TWP WD-LAYNE 2	76-10-21	70.00	491	457	425	457	422	457	1440	850
	77-09-01	70.00	491	457	425	457	422	457	360	625
KEANSBURG BORO WD 6-68	76-10-20	10.00	--	362	--	--	302	362	10	1200
	77-08-31	10.00	--	362	--	--	302	362	10	1000
KEYPORT BORO WD 5	76-10-20	10.00	261	261	201	259	204	261	30	450
KEYPORT BORO WD 4	77-03-30	12.00	--	289	--	--	225	285	170	15
KEANSBURG BORO WD 3	76-10-20	12.00	--	348	306	354	308	348	15	900
	77-01-07	12.00	--	348	306	354	308	348	15	900
	77-08-31	12.00	--	348	306	354	308	348	14	820
INFERN-O-THERM CO	77-03-31	15.00	--	300	--	--	--	--	95	30
UNION BEACH BORO WD 1-62	76-10-21	10.00	300	290	224	288	235	285	10	700
	77-01-06	10.00	300	290	224	288	235	285	1440	700
	77-03-30	10.00	300	290	224	288	235	285	20	700
	77-04-20	10.00	300	290	224	288	235	285	10	700
	77-08-15	10.00	300	290	224	288	235	285	15	650
	77-09-01	10.00	300	290	224	288	235	285	10	650
UNION BEACH BORO WD 3-77	77-09-01	10.00	--	540	--	--	--	--	105	1200
UNION BEACH BORO WD 2-69	76-10-21	10.00	307	294	260	290	262	289	--	--
	77-03-30	10.00	307	294	260	290	262	289	180	700
INT FLAVOR FRAG 2	76-10-20	10.00	--	326	--	--	302	326	1440	250
	77-01-06	10.00	--	326	--	--	302	326	25	250
	77-09-01	10.00	--	326	--	--	302	326	65	280
INT FLAVOR FRAG 1	76-10-20	10.00	--	328	265	331	298	328	1440	150
	77-01-06	10.00	--	328	265	331	298	328	20	150
	77-09-01	10.00	--	328	265	331	298	328	10	150
NPS-SANDY HOOK 5A-70	77-09-01	10.00	--	878	--	--	838	878	15	500
NPS-SANDY HOOK 4	77-09-01	15.00	--	486	--	--	332	486	15	250

MONMOUTH COUNTY--Continued

LOCAL IDENT- I- FIER	LAT- I- TUDE	LONG- I- TUDE	SEQ. NO.	GEO- LOGIC UNIT	DATE OF SAMPLE	TIME	TOTAL DEPTH OF WELL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	INSTAN- TANEOUS FLOW RATE (GPM)
SANDY HOOK SP OBS 1	40 25 36	073 59 05	01	211MGRH	77-09-07	1430	397	11.00	270	14

LOCAL IDENT- I- FIER	DATE OF SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	TOTAL CAL- CIUM (CA) (MG/L)
SANDY HOOK SP OBS 1	77-09-07	158	7.1	15.5	150	55	10	49	0	15

LOCAL IDENT- I- FIER	DATE OF SAMPLE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	TOTAL PO- TAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
SANDY HOOK SP OBS 1	77-09-07	15	2.9	2.9	7.8	7.8	6.0	6.0	77	0

LOCAL IDENT- I- FIER	DATE OF SAMPLE	ALKA- LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FLUO- RIDE (F) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	TOTAL NITRATE (N) (MG/L)
SANDY HOOK SP OBS 1	77-09-07	63	9.8	13	2.2	.1	.1	11	96	.00

LOCAL IDENT- I- FIER	DATE OF SAMPLE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS- SOL- VED ORGANIC CARBON (C) (MG/L)
SANDY HOOK SP OBS 1	77-09-07	.00	.52	.00	.52	.52	.94	.04	8.7	6.9

LOCAL IDENT- I- FIER	LAT- I- TUDE	LONG- I- TUDE	SEQ. NO.	GEO- LOGIC UNIT	DATE OF SAMPLE	TIME	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
SANDY HOOK SP OBS 1	40 25 36	073 59 05	01	211MGRH	77-09-07	1430	0	0	<10	4

LOCAL IDENT- I- FIER	DATE OF SAMPLE	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	SUS- PENDED MAN- GANESE (MN) (UG/L)
SANDY HOOK SP OBS 1	77-09-07	24	14000	10	13	140	30

LOCAL IDENT- I- FIER	DATE OF SAMPLE	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
SANDY HOOK SP OBS 1	77-09-07	110	.0	16	110

OCEAN COUNTY

LOCAL IDENT- I- FIER	LAT- I- TUDE	LONG- I- TUDE	SEQ. NO.	GEO- LOGIC UNIT	DATE OF SAMPLE	TIME	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
BEACH HAVEN BORO WD 8	39 33 46	074 14 30	01	122KRKD	77-07-12	1035	17.2	61	6.5	5.9
SHIP BOTTOM BORO WD 5-74	39 38 48	074 10 53	01	122KRKD	77-07-12	1130	16.6	57	6.6	4.5
BARNEGAT WC 4-75	39 45 20	074 13 17	01	121CNSY	77-07-12	1325	12.4	50	4.4	7.0
BARNEGAT LIGHT BORO WD 2	39 45 24	074 06 32	01	124MQVC	77-07-12	1200	17.7	336	8.5	2.6
OCEAN TWP MUA 1-60	39 47 44	074 11 29	01	121CNSY	77-07-12	1420	13.0	57	4.5	6.0
GARDEN STATE PKWY 1 OBS	39 47 42	074 14 20	01	121CNSY	77-01-20	1515	11.0	17	--	8.9
BERKELEY WC-PINEWALL	39 52 48	074 10 11	01	121CNSY	77-07-21	1430	--	54	--	7.5
SHORE WATER CO 2	39 54 23	074 04 59	01	124MQVC	77-07-13	1150	16.5	303	8.0	2.1
SEASIDE PARK BORO WD 3	39 54 51	074 05 02	01	124MQVC	77-07-13	1245	15.3	220	8.0	1.3
BERKELEY WC-BAYVILLE	39 54 54	074 09 06	01	121CNSY	77-07-21	1415	--	91	--	12
BEACHWOOD BORO WD 4	39 55 30	074 12 21	01	121CNSY	77-07-12	1515	12.5	55	4.6	9.3
OCEAN GATE BORO WD 3	39 55 28	074 08 26	01	121CNSY	77-07-21	1200	--	48	--	7.1
SEASIDE PARK BORO WD 5	39 56 07	074 04 43	01	124MQVC	77-07-13	1300	16.3	235	8.6	2.4
SEASIDE HTS BORO WD 12	39 56 36	074 04 39	03	122KRKD	77-07-13	1330	14.3	204	6.6	37
SEASIDE HTS BORO WD 3	39 56 43	074 04 43	01	122KRKD	77-07-13	1340	14.0	103	6.1	15
LAVALLETTE BORO WD 4	39 58 08	074 04 16	01	211MGHH	77-07-13	1415	24.2	184	7.6	2.1
LAVALLETTE BORO WD 2	39 58 08	074 04 21	01	211EGLS	77-07-13	1425	21.2	339	8.3	3.4
OCEAN CO COLLEGE 2-70	40 00 05	074 09 37	01	121CNSY	77-07-13	1050	13.3	52	4.9	9.3
TOMS R WC-SILVERTON 1-56	40 00 20	074 07 29	01	122KRKD	77-07-13	0955	13.5	86	6.8	5.6
OCEAN CO WC-MANTOLKING 7	40 02 10	074 03 10	02	211MGHH	77-07-14	1050	24.8	163	7.3	2.2
OCEAN CO WC BAYHEAD 6	40 04 05	074 02 44	01	211EGLS	77-07-14	1035	20.8	220	7.7	2.0
PT PLEASANT BORO WD 7	40 04 09	074 04 06	01	211MGHH	77-07-14	1330	25.1	155	7.1	1.8
COLLIERS MILLS T#1 OBS	40 04 16	074 27 01	01	211EGLS	77-09-06	1530	14.5	178	7.9	1.9
COLLIERS MILLS T#3 OBS	40 04 16	074 27 01	03	211MLHL	77-09-06	1145	13.5	168	7.8	2.3
PT PLEASANT BORO WD 4	40 05 01	074 04 55	01	121CNSY	77-07-14	1420	--	153	6.4	5.3
PT PLEAS BCH BORO WD 11	40 05 12	074 02 51	01	122KRKD	77-07-14	1120	13.7	97	6.8	13
PT PLEAS BCH BORO WD 9	40 05 36	074 02 52	01	122KRKD	77-07-14	1130	13.9	500	6.8	130
PT PLEAS BCH BORO WD 10	40 05 51	074 02 43	01	122KRKD	77-07-21	1030	14.0	388	--	110

LOCAL IDENT- I- FIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL)	TOTAL DEPTH OF HOLE (FT. BELOW LSD)	TOTAL DEPTH OF WELL (FT)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH TO BOT-TOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	INSTAN-TANEOUS FLOW RATE (GPM)
BEACH HAVEN BORO WD 8	77-07-12	5.00	--	656	--	--	572	656	10	400
SHIP BOTTOM BORO WD 5-74	77-07-12	5.00	616	588	--	--	528	588	10	800
BARNEGAT WC 4-75	77-07-12	25.00	193	168	--	173	141	163	10	750
BARNEGAT LIGHT BORO WD 2	77-07-12	7.00	675	646	570	668	593	646	120	600
OCEAN TWP MUA 1-60	77-07-12	10.00	160	160	125	160	140	160	10	140
GARDEN STATE PKWY 1 OBS	77-01-20	50.00	--	21	--	--	18	21	--	--
BERKELEY WC-PINEWALL	77-07-21	45.00	--	200	--	--	--	--	10	400
SHORE WATER CO 2	77-07-13	10.00	669	527	495	564	495	527	10	220
SEASIDE PARK BORO WD 3	77-07-13	4.00	513	507	452	505	459	503	1440	325
BERKELEY WC-BAYVILLE	77-07-21	20.00	--	90	--	--	--	--	15	350
BEACHWOOD BORO WD 4	77-07-12	60.00	--	99	--	--	65	97	15	350
OCEAN GATE BORO WD 3	77-07-21	7.00	--	120	--	--	--	--	120	325
SEASIDE PARK BORO WD 5	77-07-13	5.00	480	425	370	474	383	425	1440	100
SEASIDE HTS BORO WD 12	77-07-13	5.00	175	175	138	--	144	175	120	1000
SEASIDE HTS BORO WD 3	77-07-13	4.00	206	156	141	191	146	156	720	500
LAVALLETTE BORO WD 4	77-07-13	5.00	1642	1515	1337	1580	1358	1515	8	800
LAVALLETTE BORO WD 2	77-07-13	5.00	1136	1136	1120	--	1121	1136	10	300
OCEAN CO COLLEGE 2-70	77-07-13	15.00	90	80	--	--	66	80	10	60
TOMS R WC-SILVERTON 1-56	77-07-13	6.00	237	237	219	236	209	236	1440	230
OCEAN CO WC-MANTOLKING 7	77-07-14	10.00	1456	1369	1219	1361	1263	1369	360	640
OCEAN CO WC BAYHEAD 6	77-07-14	10.00	825	818	775	819	778	818	720	370
PT PLEASANT BORO WD 7	77-07-14	15.00	1261	1261	--	--	1183	1219	330	500
COLLIERS MILLS T#1 OBS	77-09-06	137.00	--	427	--	--	417	427	120	13
COLLIERS MILLS T#3 OBS	77-09-06	135.00	--	270	--	--	260	270	90	15
PT PLEASANT BORO WD 4	77-07-14	13.00	178	75	28	75	45	75	30	350
PT PLEAS BCH BORO WD 11	77-07-14	10.00	168	143	129	141	130	143	10	800
PT PLEAS BCH BORO WD 9	77-07-14	11.00	168	134	95	--	96	134	720	700
PT PLEAS BCH BORO WD 10	77-07-21	10.00	--	130	--	--	86	130	15	700

OCEAN COUNTY--Continued

LOCAL IDENT-I-FIER	LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	GEO-LOGIC UNIT	DATE OF SAMPLE	TIME	TOTAL DEPTH OF WELL (FT)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL)
GARDEN STATE PKWY 1 OBS	39 47 42	074 14 20	01	121CNSY	77-01-20	1515	21	21	18	50.00
COLLIERS MILLS TW1 OBS	40 04 16	074 27 01	01	211EGLS	77-09-06	1530	427	427	417	137.00
COLLIERS MILLS TW3 OBS	40 04 16	074 27 01	03	211MLRL	77-09-06	1145	270	270	260	135.00

LOCAL IDENT-I-FIER	DATE OF SAMPLE	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	INSTAN-TANEOUS FLOW RATE (GPM)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	HARD-NESS (CA,MG) (MG/L)
GARDEN STATE PKWY 1 OBS	77-01-20	--	--	17	--	11.0	10	30	--	4
COLLIERS MILLS TW1 OBS	77-09-06	120	13	178	7.9	14.5	80	55	20	78
COLLIERS MILLS TW3 OBS	77-09-06	90	15	168	7.8	13.5	5	1	2	73

LOCAL IDENT-I-FIER	DATE OF SAMPLE	NON-CAR-BONATE HARD-NESS (MG/L)	TOTAL CAL-CIUM (CA) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	TOTAL MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	TOTAL PO-TAS-SIUM (K) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)
GARDEN STATE PKWY 1 OBS	77-01-20	0	1.0	.8	.6	.4	4.7	3.4	.6	.3
COLLIERS MILLS TW1 OBS	77-09-06	0	26	26	3.2	3.2	2.4	2.3	4.4	4.4
COLLIERS MILLS TW3 OBS	77-09-06	0	24	24	3.2	3.2	2.2	2.0	4.9	4.9

LOCAL IDENT-I-FIER	DATE OF SAMPLE	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	TOTAL FLUO-RIDE (F) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)
GARDEN STATE PKWY 1 OBS	77-01-20	6	0	5	--	.9	8.9	--	.1	6.5
COLLIERS MILLS TW1 OBS	77-09-06	96	0	79	1.9	5.9	1.9	.2	.1	10
COLLIERS MILLS TW3 OBS	77-09-06	100	0	82	2.5	2.8	2.3	.2	.2	11

LOCAL IDENT-I-FIER	DATE OF SAMPLE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)
GARDEN STATE PKWY 1 OBS	77-01-20	24	--	--	.01	.06	.07	.17
COLLIERS MILLS TW1 OBS	77-09-06	95	.00	.00	.14	.08	.22	.22
COLLIERS MILLS TW3 OBS	77-09-06	88	.01	.00	.17	.04	.21	.22

LOCAL IDENT-I-FIER	DATE OF SAMPLE	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOL-VED ORGANIC CARBON (C) (MG/L)
GARDEN STATE PKWY 1 OBS	77-01-20	--	--	14	--
COLLIERS MILLS TW1 OBS	77-09-06	.18	.02	12	3.9
COLLIERS MILLS TW3 OBS	77-09-06	.02	.02	6.3	4.0

OCEAN COUNTY--Continued

LOCAL IDENT-I-FIER	LATI-TUDE	LONGI-TUDE	SEQ. NO.	GEO-LOGIC UNIT	DATE OF SAMPLE	TIME	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
GARDEN STATE PKWY 1 OBS	39 47 42	074 16 20	01	121CNSY	77-01-20	1515	--	--	--	--
COLLIERS MILLS TW1 OBS	40 04 16	074 27 01	01	211EGLS	77-09-06	1530	3	0	<10	0
COLLIERS MILLS TW3 OBS	40 04 16	074 27 01	03	211MLRL	77-09-06	1145	0	0	<10	0

LOCAL IDENT-I-FIER	DATE OF SAMPLE	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	SUS-PENDED MAN-GANESE (MN) (UG/L)
GARDEN STATE PKWY 1 OBS	77-01-20	--	4000	440	--	20	0
COLLIERS MILLS TW1 OBS	77-09-06	29	15000	20	55	90	60
COLLIERS MILLS TW3 OBS	77-09-06	0	1300	160	7	10	0

LOCAL IDENT-I-FIER	DATE OF SAMPLE	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
GARDEN STATE PKWY 1 OBS	77-01-20	20	--	--	--
COLLIERS MILLS TW1 OBS	77-09-06	30	.0	9	50
COLLIERS MILLS TW3 OBS	77-09-06	10	.0	17	30

THE FOLLOWING LIST SHOWS THE AQUIFER CODES AND GEOLOGIC NAMES OF THE FORMATIONS IN WHICH THE WELLS ARE FINISHED. THE AQUIFER CODES ALSO APPEAR IN THE COLUMN "GEOLOGIC UNIT" IN THE PRECEDING TABLE:

112CPMY , CAPE MAY FORMATION UNDIFFERENTIATED
112ERNS , CAPE MAY FORMATION, ESTURINE SAND FACIES
112PLCC , PLEISTOCENE-COHANSEY SAND UNDIFFERENTIATED
121CNSY , COHANSEY SAND
121CKKD , COHANSEY/SAND-KIRKWOOD FORMATION
122KRKDU, KIRKWOOD FORMATION, UPPER SAND
122KRKD , KIRKWOOD FORMATION
122KRKDL, KIRKWOOD FORMATION, LOWER SAND
124MQVC , MANASQUAN-VINCENTOWN FORMATION, UNDIFFERENTIATED
124PNPN , PINEY POINT FORMATION
125HRRS , HORNERSTOWN SAND
211MLRW , MOUNT LAUREL SAND-WENONAH FORMATION
211EGLS , ENGLISHTOWN FORMATION
211MGRW , MAGOTHY-RARITAN FORMATIONS
211ODBG , RARITAN FORMATION, OLD BRIDGE SAND MEMBER
211FRNG , RARITAN FORMATION, FARRINGTON SAND MEMBER
217PTMC , POTOMAC GROUP

EXPLANATION OF GROUND WATER COLUMN HEADINGS

TOTAL DEPTH OF WELL(FT):
MAXIMUM DEPTH BELOW LAND SURFACE DATUM AT WHICH THE WELL WAS ORIGINALLY FINISHED. THIS DEPTH MAY BE SLIGHTLY DEEPER THAN "DEPTH TO THE BOTTOM OF SAMPLE INTERVAL" BECAUSE MANY WELLS HAVE A "TAILPIECE" OR SHORT LENGTH OF CASING INSTALLED BELOW THE WELL SCREEN.

TOTAL DEPTH OF HOLE(FT. BELOW LSD):
TOTAL DEPTH TO WHICH THE HOLE WAS DRILLED, REGARDLESS OF THE FINISHED DEPTH OF THE WELL.

DEPTH TO THE TOP OF WATER BEARING ZONE(FT):
THE DEPTH LISTED IS THE BEST AVAILABLE INFORMATION WHICH INDICATES THE TOP OF THE WATER-BEARING ZONE THAT IS FURNISHING WATER TO THE WELL.

DEPTH TO BOTTOM OF WATER-BEARING ZONE(FT):
THE DEPTH LISTED IS THE BEST AVAILABLE INFORMATION WHICH INDICATES THE BOTTOM OF THE WATER-BEARING ZONE THAT IS FURNISHING WATER TO THE WELL. IF THE WELL DOES NOT FULLY PENETRATE THE WATER-BEARING ZONE THIS PARAMETER IS LEFT BLANK.

DEPTH TO THE TOP OF SAMPLE INTERVAL(FT):
IN A FULLY CASED WELL THIS VALUE IS THE UPPERMOST POINT AT WHICH WATER CAN ENTER THE WELL. IN BEDDED SEDIMENTS THIS IS USUALLY THE UPPERMOST PART OF THE SCREENED INTERVAL. IN SOME WELLS THE TOP OF THE WELL SCREEN IS INSTALLED INSIDE AND A FEW FEET ABOVE THE BOTTOM OF THE CASING. UNDER THESE CONDITIONS THE BOTTOM OF THE CASING IS CONSIDERED TO BE THE TOP OF THE SAMPLE INTERVAL.

DEPTH TO BOTTOM OF SAMPLE INTERVAL(FT):
IN A FULLY CASED WELL THIS VALUE IS THE LOWERMOST POINT AT WHICH WATER CAN ENTER THE WELL.

PUMP OR FLOW PERIOD PRIOR TO SAMPLING:
THIS PARAMETER IS INTENDED PRIMARILY FOR USE WITH THE PARAMETER "INSTANTANEOUS FLOW RATE", SO THAT THE EXACT VOLUME OF WATER PUMPED PRIOR TO SAMPLING CAN BE DETERMINED.

INSTANTANEOUS FLOW RATE:
FLOW RATE AT WHICH WATER IS REMOVED FROM THE WELL. INTENDED FOR USE WITH ABOVE PARAMETER SO THAT THE EXACT VOLUME OF WATER PUMPED PRIOR TO SAMPLING CAN BE DETERMINED.

PAGE

A

ABSECON CREEK AT ABSECON........409,464
ACCURACY OF DATA........11
ACKNOWLEDGEMENTS........1
ACRE-FOOT, DEFINITION........2
ADENOSINE TRIPHOSPHATE, DEFINITION........2
ALBERTSON BROOK NEAR HAMMONTON........357,455
ALGAE, DEFINITION........2
ALGAL GROWTH POTENTIAL(AGP), DEFINITION........2
ALLENDALE, HOHOKUS BROOK AT........458
  RAMSEY BROOK AT........458
ALLENWOOD, MANASQUAN RIVER AT........462
  MANASQUAN R AT SQUANKUM-ALLENWOOD ROAD AT........300
ANCORA, BLUE ANCHOR BROOK AT........356
  PUMP BRANCH AT........355
APPLEGARTH, MILLSTONE RIVER AT........216
AQUIFER CODE LIST........487
AQUIFER, DEFINITION........2
ARTESIAN, DEFINITION........2
ASH MASS, DEFINITION........3
ATCO, MULLICA RIVER NEAR........347,454,462
ATLANTIC CITY, BEACH THOROFARE AT........449
ATLANTIC COUNTY, GROUND WATER........474
ATSION, CLARKS BRANCH NEAR........454
  MULLICA RIVER AT........454
  MULLICA RIVER AT OUTLET OF ATSION LAKE AT........349
  MULLICA RIVER TRIBUTARY AT........454
  SLEEPER BRANCH DIVERSION CHANNEL NEAR........353
  SLEEPER BRANCH NEAR........454
  SPRINGERS BROOK NEAR........455
AWOSTING, WANAQUE RIVER AT........72

B

BABCOCK CREEK NEAR MAYS LANDING........444
BACTERIA, DEFINITION........2
BALDWIN CREEK AT PENNINGTON........460
BARCLAY BROOK NEAR ENGLISHTON........265
BARNEGAT BAY AT BARNEGAT LIGHT........464
  AT BAY SHORE........464
BARNEGAT LIGHT, BARNEGAT BAY AT........464
BARTLEY, DRAKES BROOK AT........105
BASS RIVER AT NEW GRETNA........408
  EAST BRANCH, AT DANS BRIDGE........403
    NEAR NEW GRETNA........404
  WEST BRANCH, TRIB. NEAR HARRISVILLE........406
    NEAR NEW GRETNA........407
BATSTO, MULLICA RIVER NEAR........351
  SLEEPER BRANCH AT........454
BATSTO RIVER AT BATSTO........376
  AT HAMPTON GATE........368
  AT PLEASANT MILLS........378,464
  AT QUAKER BRIDGE........374
  NEAR HAMPTON FURNACE........369
BAY SHORE, BARNAGET BAY AT........464
BEACH THOROFARE AT ATLANTIC CITY........449
BEAR BROOK AT GROVERS MILL........220
BEAVER RUN AT HARRISVILLE........401
BEAVERDAM BROOK NEAR PATRICKS CORNER........453
BEDEN BROOK NEAR HOPEWELL........461
  NEAR ROCKY HILL........230,461
BED MATERIAL, DEFINITION........3
BEDLOAD, DEFINITION........3
BEDMINSTER, N.B. RARITAN RIVER AT........143
BEESLEYS POINT, GREAT EGG HARBOR BAY AT........464
BELCHER CREEK AT STOWAWAY ROAD AT WEST MILFORD........452
  AT WEST MILFORD........452
  TRIBUTARY AT WEST MILFORD........452
BELLEVILLE, SECOND RIVER AT........459
BERLIN, GREAT EGG HARBOR AT........410
BERNARDSVILLE, PASSAIC RIVER NEAR........457
BERRYLAND, HOSPITALITY BRANCH AT........437,456
BIOCHEMICAL OXYGEN DEMAND, DEFINITION........3
BIOMASS, DEFINITION........3
BLACK CREEK NEAR VERNON........43
BLACK RIVER. SEE LAMINGTON RIVER
BLACKWELLS MILLS, MILLSTONE RIVER AT........236
BLAWENBURG, ROCK BROOK NEAR........461
BLUE ANCHOR, BLUE ANCHOR BROOK NEAR........455,462
  GREAT EGG HARBOR RIVER NEAR........427
  PUMP BRANCH NEAR........455,462
BLUE ANCHOR BROOK AT ANCORA........356
  NEAR BLUE ANCHOR........455
BLUE GREEN ALGAE, DEFINITION........6
BOONTON RESERVOIR DATA........96,97
  ROCKAWAY RIVER ABOVE RESERVOIR, AT........59
  ROCKAWAY RIVER BELOW RESERVOIR, AT........61
BOUND BROOK AT MIDDLESEX........246
  AT SOUTH BOUND BROOK........462
BOUND BROOK, RARITAN RIVER BELOW CALCO DAM, AT........243
BROOKVILLE, FOURMILE BRANCH NEAR........339
  OSWEGO RIVER AT RT. 72 NEAR........394
  OYSTER CREEK NEAR........333
  YELLOW DAM BRANCH AT RT. 72 NEAR........395
BUDD LAKE, SOUTH BRANCH RARITAN RIVER AT OUTLET OF.........104
  SOUTH BRANCH RARITAN R. TRIB NO.6 AT........453
  SOUTH BRANCH RARITAN RIVER TRIBUTARY NO.7 AT........453
BURNT MILLS, LAMINGTON RIVER AT........200
  NORTH BRANCH RARITAN RIVER AT........146
BUSHKILL AT ROCKEFELLOWS MILLS........133

C

CAMDEN COUNTY, GROUND WATER........468
CANISTEAR RESERVOIR........96,97
CAPE MAY, CAPE MAY HARBOR AT........465
CAPE MAY COUNTY, GROUND WATER........475
CAPE MAY HARBOR AT CAPE MAY........465

PAGE

CEDAR CREEK AT CEDAR CREST........326
  AT DOUBLE TROUBLE........327
  AT LANOKA HARBOR........328
CEDAR CREST, CEDAR CREEK AT........326
CEDARWOOD PARK, KETTLE CREEK AT........306
CELLS/VOLUME, DEFINITION........3
CFS-DAY, DEFINITION........3
CHAMBERS BROOK AT N. BRANCH DEPOT........208
CHARLOTTEBURG RESERVOIR DATA........96,97
CHATHAM, PASSAIC RIVER NEAR........56
CHATSWORTH, GATES BRANCH NEAR........387
  WEST BRANCH WADING RIVER AT........388
  WEST BRANCH WADING RIVER NEAR........455
CHEMICAL OXYGEN DEMAND, DEFINITION........3
CHESILHURST, HAYS MILL CREEK NEAR........454,462
  WILDCAT BRANCH AT........352,454,462
CHESTER, NORTH BRANCH RARITAN RIVER NEAR........140
CHLOROPHYLL, DEFINITION........3
CLARKS BRANCH NEAR ATSION........454
CLARKSVILLE, DUCK POND RUN AT........460
CLIFTON, WEASEL BROOK AT........459
CLINTON RESERVOIR DATA........96,97
CLINTON, SPRUCE RUN AT........121
CLOSTER, TENAKILL BROOK AT........457
COLLECTION AND COMPUTATION OF DATA........9
COLLECTION AND EXAMINATION OF DATA........12
COLOR UNIT, DEFINITION........3
COLTS NECK, YELLOW BROOK AT........281
COMPUTATIONS, ACCURACY OF, RESULTS OF........11
CONTENTS, DEFINITION........3
CONTINUING RECORD STATION, DEFINITION........3
CONTROL, DEFINITION........3
CONTROL STRUCTURE, DEFINITION........3
COOLEY BROOK NEAR WEST MILFORD........452
COOPERATION, CREDITS FOR........1
CRANBURY BROOK AT PLAINSBORO........219
CRESSKILL, TENAKILL BROOK AT........457
CREST-STAGE PARTIAL-RECORD STATIONS........457
CUBIC FEET PER SECOND PER SQUARE MILE, DEF........3
CUBIC FOOT PER SECOND, DEFINITION........3

D

DANS BRIDGE, EAST BRANCH BASS RIVER AT........403
DAVENPORT BRANCH NEAR DOVER FORGE........323
DAVIDSONS MILL POND, LAWRENCE BROOK AT OUTLET OF........453
DEEP RUN AT OLD BRIDGE........274
  AT WEYMOUTH........456
  NEAR WEYMOUTH........441
DEFINITION OF TERMS........2
DE FOREST LAKE, NY........51
DEVILS BROOK NEAR PRINCETON JUNCTION........221
DIATOMS, DEFINITION........6
DISCHARGE, DEFINITION........3
DISCHARGE AT MISCELLANEOUS SITES........466,467
DISSOLVED, DEFINITION........3
DIVERSITY INDEX, DEFINITION........4
DOUBLE TROUBLE, CEDAR CREEK AT........327
DOVER FORGE, DAVENPORT BRANCH NEAR........323
DOWNSTREAM ORDER AND STATION NUMBERS........8
DRAINAGE AREA, DEFINITION........4
DRAINAGE BASIN, DEFINITION........4
DRAKES BROOK AT BARTLEY........105
DRY MASS, DEFINITION........3
DUCK POND RUN AT CLARKSVILLE........460
DUKES BRIDGE, WEST BRANCH WADING RIVER AT RT 563 AT........389
DUNELLEN, GREEN BROOK AT........461
DWARS KILL AT NORWOOD........452

E

EAST SPOTSWOOD, IRESICK BROOK AT........454
EATONTOWN, WAMPUM BROOK AT........288
ECHO LAKE........96,98
EGG HARBOR, LANDING CREEK AT PHILADELPHIA AVE. AT........455
  LANDING CREEK NEAR........383
ELIZABETH, ELIZABETH RIVER AT URSINO LAKE........100
ELIZABETH RIVER AT URSINO LAKE, ELIZABETH........100
ELM, GREAT SWAMP BRANCH AT........358
ELMWOOD PARK, FLEISCHER BROOK AT MARKET ST........458
  PASSAIC RIVER AT ROUTE 46 AT........90
ENGLEWOOD, METZLER BROOK AT........457
ENGLISHTOWN, BARCLAY BROOK NEAR........265
  MATCHAPONIX BROOK NEAR........264
ESSEX COUNTY, GROUND WATER........469
ESTELL MANOR, TUCKAHOE RIVER NEAR........445
EXPLANATION OF GROUND-WATER LEVEL RECORDS........17
EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS........9
EXPLANATION OF WATER-QUALITY RECORDS........12

F

FAR HILLS, MINE BROOK AT........144
  NORTH BRANCH RARITAN RIVER NEAR........142,459
FARMINGDALE, MINGAMAHONE BROOK AT........462
FARRINGTON DAM, LAWRENCE BROOK AT........262
FECAL COLIFORM BACTERIA, DEFINITION........2
FECAL STREPTOCOCCAL BACTERIA, DEFINITION........2
FLEISCHER BROOK AT MARKET ST, ELMWOOD PARK........458
FLEMINGTON, WALNUT BROOK NEAR........459
FOLSOM, GREAT EGG HARBOR RIVER AT........432
FORKED RIVER, NORTH BRANCH AT FORKED RIVER........331
  NEAR FORKED RIVER MOUNTAIN........330
FOURMILE BRANCH AT NEW BROOKLYN........424
  AT WINSLOW CROSSING........422,456
  NEAR BROOKVILLE........339
  NEAR MANAHAWKIN........340
FRANKLIN, WALLKILL RIVER AT........37

PAGE

G

- GAGE HEIGHT, DEFINITION ... 4
- GAGING STATION, DEFINITION ... 4
  - RECORDS ... 36
- GATES BRANCH NEAR CHATSWORTH ... 387
- GEORGIA, MANASQUAN RIVER NEAR ... 293,462
- GLENMOORE, STONY BROOK AT ... 460
- GOVERNORS BRANCH NEAR STAFFORD FORGE ... 343
- GRASSY SOUND AT WEST WILDWOOD ... 465
- GREAT CHANNEL AT STONE HARBOR ... 465
- GREAT EGG HARBOR BAY AT BEESLEYS POINT ... 464
  - AT OCEAN CITY ... 465
- GREAT EGG HARBOR RIVER AT BERLIN ... 410
  - AT FOLSOM ... 432
  - AT MAYS LANDING ... 443
  - AT WEYMOUTH ... 440
  - NEAR BLUE ANCHOR ... 427
  - NEAR SICKLERVILLE ... 412,456
  - TRIBUTARY AT SICKLERVILLE ... 415
  - TRIBUTARY AT SICKLERVILLE AT POND ... 414
  - TRIBUTARY NO 2 AT WINSLOW CROSSING ... 420
- GREAT SWAMP BRANCH AT ELM ... 358
  - NEAR HAMMONTON ... 359
- GREEN ALGAE, DEFINITION ... 6
- GREEN BANK, MULLICA RIVER AT ... 381
- GREEN BROOK AT DUNELLEN ... 461
  - AT NORTH PLAINFIELD ... 461
  - AT PLAINFIELD ... 244
  - AT ROCK AVE., PLAINFIELD ... 461
  - NEAR WEST MILFORD ... 452
- GREENVILLE, MUDDY FORD BROOK AT ... 302
- GREENWOOD LAKE ... 97,98
- GROUND-WATER LEVEL RECORDS ... 468
- GROUND-WATER QUALITY RECORDS ... 474
- GROVERS MILL, BEAR BROOK AT ... 220
  - MILLSTONE RIVER AT ... 218

H

- HACKENSACK RIVER AT NEW MILFORD ... 49
  - AT RIVERVALE ... 45
  - AT WEST NYACK, NY ... 44
- HACKENSACK RIVER BASIN, DIVERSIONS ... 52
  - ELEVATION ... 51
  - RESERVOIRS IN ... 51
- HAMMONTON, ALBERTSON BROOK NEAR ... 357,455
  - GREAT SWAMP BRANCH NEAR ... 359
- HAMMONTON CREEK AT HAMMONTON ... 364
  - AT RT. 30 AT HAMMONTON ... 363
  - AT WESCOATVILLE ... 365
- HAMPTON FURNACE, BATSTO RIVER NEAR ... 369
  - SPRINGERS BROOK NEAR ... 373
- HAMPTON GATE, BATSTO RIVER AT ... 368
- HARDNESS, DEFINITION ... 4
- HARRISVILLE, BEAVER RUN AT ... 401
  - OSWEGO RIVER AT ... 398
  - WEST BRANCH BASS RIVER TRIB. NEAR ... 406
- HART BROOK NEAR PENNINGTON ... 460
- HAYCOCK BROOK AT POMPTON LAKES ... 453
- HAYS MILLS CREEK NEAR CHESILHURST ... 454,462
- HEAD OF RIVER, TUCKAHOE RIVER AT ... 446
- HEATHCOTE BROOK AT KINGSTON ... 227
- HELMETTA, MANALAPAN BROOK AT ... 268
- HIGH BRIDGE, SOUTH BRANCH RARITAN RIVER NEAR ... 109
  - SB RARITAN RIVER AT ARCH STREET AT ... 115
  - SPRUCE RUN NEAR ... 117,453
- HIGH TIDE, DEFINITION ... 4
- HOHOKUS BROOK AT ALLENDALE ... 458
  - AT HOHOKUS ... 458
- HOLLAND BROOK AT SOUTH BRANCH ... 138
- HOLMDEL, WILLOW BROOK NEAR ... 279
- HONEY BRANCH NEAR MOUNT ROSE ... 460
  - NEAR ROSEDALE ... 460
- HOPEWELL, BEDEN BROOK NEAR ... 461
- HOSPITALITY BRANCH AT BERRYLAND ... 437,456
  - AT PENNY POT ... 438
- HUDSON RIVER BASIN, DISCHARGE MEASUREMENTS AT MISCELLANEOUS SITES ... 466
- HYDROLOGIC BENCH-MARK STATION, DEFINITION ... 9
- HYDROLOGIC CONDITIONS ... 2
- HYDROLOGIC UNIT, DEFINITION ... 4

I

- INDEX ... 488
- INDIAN MILLS, INDIAN MILLS BROOK NEAR ... 370
  - MULLICA RIVER AT JACKSON RD. NEAR ... 348
  - SPRINGERS BROOK NEAR ... 371,455
- INDIAN MILLS BROOK NEAR INDIAN MILLS ... 370
- INFILTRATION POND AT STP AT WINSLOW CROSSING ... 423
- INSTANTANEOUS DISCHARGE, DEFINITION ... 3
- INTRODUCTION ... 1
- IRELAND BROOK AT PATRICKS CORNER ... 453
- IRESICK BROOK AT EAST SPOTSWOOD ... 454
- IRONIA, LAMINGTON (BLACK) RIVER NEAR ... 152

J

- JACKSONS MILLS, SOUTH BRANCH METEDECONK RIVER NEAR. 304
- JAKES BRANCH AT SOUTH TOMS RIVER ... 324
- JENKINS, TULPEHOCKEN CREEK NEAR ... 391,455
  - WEST BRANCH WADING RIVER NEAR ... 390
- JUMPING BROOK NEAR NEPTUNE CITY ... 291

PAGE

K

- KETTLE CREEK AT CEDARWOOD PARK ... 306
- KINGSTON, HEATHCOTE BROOK AT ... 227
  - MILSTONE RIVER AT ... 229
- KRESWICK GROVE, MICHAELS RUN NEAR ... 322

L

- LAKE CARNEGIE, MILLSTONE RIVER AT ... 461
- LAKEHURST, RIDGEWAY BRANCH AT RT.70 NEAR ... 310
  - TOMS RIVER NEAR ... 308
  - UNION BRANCH NEAR ... 309
- LAKES AND RESERVOIRS
  - BOONTON RESERVOIR ... 96,97
  - CANISTEAR RESERVOIR ... 96,97
  - CHARLOTTEBURG RESERVOIR ... 96,97
  - CLINTON RESERVOIR ... 96,97
  - DE FOREST, LAKE, NY ... 51
  - ECHO LAKE ... 96,98
  - GREENWOOD LAKE ... 97,98
  - OAK RIDGE RESERVOIR ... 96
  - ORADELL RESERVOIR ... 51
  - POINT VIEW RESERVOIR ... 99
  - ROUND VALLEY RESERVOIR ... 276
  - SPLITROCK RESERVOIR ... 96,97
  - SPRUCE RUN RESERVOIR ... 276
  - TAPPAN, LAKE ... 51
  - WANAQUE RESERVOIR ... 97,98
  - WOODCLIFF LAKE ... 51
- LAKEWOOD, NORTH BRANCH METEDECONK RIVER NEAR ... 303
- LAMINGTON (BLACK) RIVER AT BURNT MILLS ... 200
  - AT LAMINGTON ... 158,459
  - AT LAMINGTON RD. NEAR NORTH BRANCH ... 192,459
  - AT MILLTOWN ... 154
  - AT SUCCASUNNA ... 151
  - NEAR IRONIA ... 152
  - NEAR POTTERSVILLE ... 155
  - NEAR WHITEHOUSE ... 159,459
- LANDING CREEK AT PHILADELPHIA AVE. AT EGG HARBOR... 455
  - NEAR EGG HARBOR CITY ... 383
  - NEAR WEEKSTOWN ... 385
- LANOKA HARBOR, CEDAR CREEK AT ... 328
- LAURELTON, SOUTH BRANCH METEDECONK RIVER NEAR ... 305
  - METEDECONK RIVER NEAR ... 464
- LAWRENCE BK AT DAVIDSONS MILL ROAD NR PATRICKS CORNER ... 260
  - AT FARRINGTON DAM ... 262
  - AT OUTLET OF DAVIDSONS MILL POND ... 453
  - AT WESTON MILLS ... 263
- LEBANON, S.B. ROCKAWAY CREEK TRIB. AT ... 167
- LITTLE FALLS, PASSAIC RIVER AT ... 88
- LODI, SADDLE RIVER AT ... 92
- LOW-FLOW PARTIAL-RECORD STATIONS ... 304
- LOW TIDE, DEFINITION ... 4
- LUCAS BRANCH AT SWEETWATER ... 380
  - NEAR SWEETWATER ... 379
- LUDLAM THOROFARE AT SEA ISLE CITY ... 450

M

- MACOPIN INTAKE DAM, PEQUANNOCK RIVER AT ... 70
- MAHWAH, RAMAPO RIVER NEAR ... 80
- MAHWAH RIVER NEAR SUFFERN, NY ... 79
- MANAHAWKIN, FOURMILE BRANCH NEAR ... 340
  - MILL CREEK AT ... 341
  - MILL CREEK NEAR ... 337
- MANAHAWKIN BAY NEAR MANAHAWKIN ... 464
- MANALAPAN BROOK AT HELMETTA ... 268
  - AT FEDERAL ROAD NEAR MANALAPAN ... 267
  - AT SPOTSWOOD ... 269
- MANASQUAN RIVER AT ALLENWOOD ... 462
  - AT SQUANKUM ... 297
  - AT SQUANKUM-ALLENWOOD ROAD AT ALLENWOOD ... 300
  - NEAR GEORGIA ... 293,462
- MANASQUAN RIVER BASIN ... 462
- MANVILLE, RARITAN RIVER AT ... 214
  - ROYCE BROOK AT SOUTH MAIN STREET AT ... 241
- MARSH BOG BROOK AT SQUANKUM ... 295
- MATAWAN CREEK AT MATAWAN ... 278
- MATCHAPONIX BROOK NEAR ENGLISHTOWN ... 264
  - AT MUNDY AVENUE AT SPOTSWOOD ... 266
- MAXWELL, WEST BRANCH WADING RIVER AT ... 392
- MAYS LANDING, BABCOCK CREEK NEAR ... 444
  - GREAT EGG HARBOR RIVER AT ... 443
- MEAN CONCENTRATION, DEFINITION ... 7
- MEAN DISCHARGE, DEFINITION ... 3
- MEAN HIGH OR LOW TIDE, DEFINITION ... 4
- MERCER COUNTY, GROUND WATER ... 470
- METAMORPHIC STAGE, DEFINITION ... 4
- METEDECONK RIVER NEAR LAURELTON ... 457,464
  - NORTH BRANCH, NEAR LAKEWOOD ... 303
    - NEAR WYCOFF MILLS ... 301
  - SOUTH BRANCH,NEAR JACKSONS MILLS ... 304
    - NEAR LAURELTON ... 305
- METHYLENE BLUE ACTIVE SUBSTANCE, DEFINITION ... 4
- METZLER BROOK AT ENGLEWOOD ... 457
- MICHAELS RUN NEAR KRESWICK GROVE ... 322
- MICROGRAMS PER GRAM, DEFINITION ... 4
- MICROGRAMS PER LITRE, DEFINITION ... 4
- MIDDLE VALLEY, SOUTH BRANCH RARITAN R. AT ... 107
- MIDDLEBUSH, SIX MILE RUN NEAR ... 234,461
- MIDDLESEX, BOUND BROOK AT ... 246
- MILL CREEK AT MANAHAWKIN ... 341
  - NEAR MANAHAWKIN ... 337

PAGE
MILLIGRAMS PER LITRE, DEFINITION.......... 4
MILLINGTON, PASSAIC RIVER NEAR.......... 53
MILLSTONE RIVER AT APPLEGARTH.......... 216
  AT BLACKWELLS MILLS.......... 236
  AT GROVERS MILLS.......... 218
  AT KINGSTON.......... 229
  AT LAKE CARNEGIE.......... 461
  AT PENNS NECK.......... 222
  AT PLAINSBORO.......... 459
  AT WESTON.......... 239
MILLTOWN, LAMINGTON RIVER AT.......... 154
MINE BROOK AT FAR HILLS.......... 144
MINGAMAHONE BROOK AT FARMINGDALE.......... 462
MISCELLANEOUS SITES.......... 452
MONKS, WANAQUE RIVER AT.......... 73
MONMOUTH COUNTY, GROUND WATER.......... 479
MORSETOWN BROOK AT WEST MILFORD.......... 452
MORRIS COUNTY, GROUND WATER.......... 470
MORRISTOWN, WHIPPANY RIVER AT.......... 64
MOUNT ROSE, HONEY BRANCH NEAR.......... 460
MUDDY FORD BROOK AT GREENVILLE.......... 302
MULHOCKAWAY CREEK AT VAN SYCKEL..........119,453
  TRIBUTARY AT VAN SYCKEL.......... 453
MULLICA RIVER AT ATSION.......... 454
  AT GREEN BANK.......... 381
  AT OUTLET OF ATSION LAKE AT ATSION.......... 349
  AT PLEASANT MILLS.......... 361
  NEAR ATCO..........347,454,462
  NEAR BATSTO.......... 351
  NEAR INDIAN MILLS, AT JACKSON RD.......... 348
  NEAR PORT REPUBLIC.......... 464
MULLICA RIVER TRIB. NEAR ATSION.......... 454
MUSQUAPSINK BROOK AT WESTWOOD.......... 457
  NEAR WESTWOOD.......... 457

N

NEPTUNE CITY, JUMPING BROOK NEAR.......... 291
  SHARK RIVER NEAR.......... 289
NESCOCHAGUE CREEK AT PLEASANT MILLS..........360,455
NESHANIC RIVER AT REAVILLE.......... 136
NEW BROOKLYN, FOURMILE BRANCH AT.......... 424
NEW BROOKLYN LAKE, WEST OUTLET AT WINSLOW CROSSING. 418
NEW BRUNSWICK, RARITAN RIVER AT LANDING LA. AT..... 259
NEW GRETNA, BASS RIVER AT.......... 408
  EAST BRANCH BASS RIVER NEAR.......... 404
  WEST BRANCH BASS RIVER TRIB. NEAR.......... 407
NEW MILFORD, HACKENSACK RIVER AT.......... 49
  NORTH BRANCH RIRITAN RIVER AT.......... 209
NORTH BRANCH, LAMINGTON RIVER AT LAMINGTON RD. NEAR 192
NORTH BRANCH DEPOT, CHAMBERS BROOK AT.......... 208
NORTH PLAINFIELD, GREEN BROOK AT.......... 461
  STONY BROOK AT.......... 461
NORTON BRANCH NEAR SWEETWATER.......... 367
NORWOOD, DWARS KILL AT.......... 452
  TENAKILL BROOK TRIBUTARY AT.......... 452
NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES. 9

O

OAK RIDGE RESERVOIR DATA.......... 96
OAKEYS BROOK NEAR PATRICKS CORNER.......... 453
OAKLAND, POND BROOK AT.......... 458
  GREAT EGG HARBOR BAY AT.......... 465
OCEAN COUNTY, GROUND WATER.......... 471
OLD BRIDGE, DEEP RUN AT.......... 274
  SOUTH RIVER AT.......... 270
  SOUTH RIVER BELOW DUHERNAL LAKE.......... 273
  TENNENTS BROOK NEAR OLD BRIDGE.......... 275
ORADELL RESERVOIR DATA.......... 51
ORGANIC MASS, DEFINITION.......... 3
OSWEGO RIVER AT HARRISVILLE.......... 398
  AT OSWEGO LAKE..........397,455
  AT RT. 72 NEAR BROOKVILLE.......... 394
OTHER DATA AVAILABLE.......... 12
OYSTER CREEK NEAR BROOKVILLE.......... 333

P

PAPAKATING CREEK AT SUSSEX.......... 39
PAPOOSE BRANCH NEAR SIM PLACE.......... 396
PARAMUS, SADDLE RIVER AT.......... 458
PARTIAL-RECORD STATIONS, CREST-STAGE.......... 457
  DEFINITION.......... 4
  LOW-FLOW.......... 452
  TIDAL CREST-STAGE.......... 464
PARTICLE SIZE, DEFINITION.......... 6
PARTICLE-SIZE CLASSIFICATION.......... 6
PASCACK BROOK AT WESTWOOD.......... 48
PASSAIC COUNTY, GROUND WATER.......... 472
PASSAIC, THIRD RIVER AT.......... 95
PASSAIC RIVER AT LITTLE FALLS.......... 88
  AT PINE BROOK.......... 458
  AT ROUTE 46 AT ELMWOOD PARK.......... 90
  AT ROUTE 46 AT SINGAC.......... 86
  AT TWO BRIDGES.......... 68
  NEAR BERNARDSVILLE.......... 457
  NEAR CHATHAM.......... 56
  NEAR MILLINGTON.......... 53
PASSAIC RIVER BASIN, CREST-STAGE PARTIAL-RECORD
    STATIONS IN.......... 458
  DIVERSIONS.......... 99
  GAGING-STATION RECORDS IN.......... 53
  RESERVOIRS IN.......... 96
    ELEVATION.......... 98
PATRICKS CORNER, BEAVERDAM BROOK NEAR.......... 453
  OAKEYS BROOK NEAR.......... 453
  IRELAND BROOK AT.......... 453
  LAWRENCE BROOK AT DAVIDSONS MILL ROAD NEAR....... 260

PAGE
PENNINGTON, BALDWIN CREEK AT.......... 460
  HART BROOK NEAR.......... 460
  STONY BROOK AT.......... 460
PENNS NECK, MILLSTONE RIVER AT.......... 222
PENNY POT, HOSPITALITY BRANCH AT.......... 438
PEQUANNOCK RIVER AT MACOPIN INTAKE DAM.......... 70
PERIPHYTON, DEFINITION.......... 6
PESTICIDES, DEFINITION.......... 6
PHYTOPLANKTON, DEFINITION.......... 6
PICOCURIE, DEFINITION.......... 6
PIKE RUN NEAR ROCKY HILL.......... 232
PINE BROOK AT TINTON FALLS.......... 285
PINE BROOK, PASSAIC RIVER AT.......... 458
  ROCKAWAY RIVER AT.......... 62
  WHIPPANY RIVER NEAR.......... 66
PINE CREEK AT WEEKSTOWN.......... 382
PLAINFIELD, GREEN BROOK AT.......... 244
  GREEN BROOK AT ROCK AVE AT.......... 461
PLAINSBORO, CRANBURY BROOK AT.......... 219
  MILLSTONE RIVER AT.......... 459
PLANKTON, DEFINITION.......... 6
PLEASANT MILLS, BATSTO RIVER AT..........378,464
  MULLICA RIVER AT.......... 361
  NESCOCHAGUE CREEK AT..........360,455
POINT VIEW RESERVOIR.......... 99
POLYCHLORINATED BIPHENYLS, DEFINITION.......... 6
POMPTON LAKES, HAYCOCK BROOK AT.......... 453
  RAMAPO RIVER AT.......... 82
POMPTON PLAINS, POMPTON RIVER AT.......... 83
POMPTON RIVER AT POMPTON PLAINS.......... 83
  AT TWO BRIDGES.......... 84
POND BROOK AT OAKLAND.......... 458
PORT REPUBLIC, MULLICA RIVER NEAR.......... 464
  TAR KILN BRANCH NEAR.......... 386
POTTERSTOWN, ROCKAWAY CREEK NEAR.......... 162
POTTERSVILLE, LAMINGTON (BLACK) RIVER NEAR.......... 155
  UPPER COLD BROOK NEAR.......... 157
PRESCOTT BROOK AT ROUND VALLEY.......... 131
PRIMARY PRODUCTIVITY, DEFINITION.......... 6
PRINCETON, STONY BROOK AT.......... 224
  STONY BROOK AT ALEXANDER ROAD AT.......... 225
  STONY BROOK AT PROVINCE LINE ROAD NEAR.......... 223
PRINCETON JUNCTION, DEVILS BROOK NEAR.......... 221
PUBLICATIONS, WATER QUALITY.......... 14
PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES
  INVESTIGATIONS.......... 19
PUMP BRANCH AT ANCORA.......... 355
  NEAR BLUE ANCHOR..........455,462

Q

QUAKER BRIDGE, BATSTO RIVER AT.......... 374
QUALITY OF GROUND-WATER RECORDS.......... 474

R

RADIOISOTOPES, DEFINITION.......... 7
RAHWAY, RAHWAY RIVER AT.......... 102
  ROBINSONS BRANCH RAHWAY RIVER AT.......... 103
RAHWAY RIVER AT RAHWAY.......... 102
  NEAR SPRINGFIELD.......... 101
RAMAPO RIVER AT POMPTON LAKES.......... 82
  NEAR MAHWAH.......... 80
RAMSEY BROOK AT ALLENDALE.......... 458
RARITAN RIVER AT LANDING LA. AT NEW BRUNSWICK....... 259
  AT MANVILLE.......... 214
  AT RARITAN.......... 213
  BELOW CALCO DAM, AT BOUND BROOK.......... 243
  NEAR SOUTH BOUND BROOK.......... 247
  NORTH BRANCH, AT BEDMINSTER.......... 143
    AT BURNT MILLS.......... 146
    AT NORTH BRANCH.......... 209
    AT SOUTH BRANCH.......... 211
    NEAR CHESTER.......... 140
    NEAR FAR HILLS..........142,459
    NEAR RARITAN.......... 210
  SOUTH BRANCH, AT ARCH ST. AT HIGH BRIDGE.......... 115
    AT MIDDLE VALLEY.......... 107
    AT OUTLET OF BUDD LAKE..........104,453
    AT OUTLET LAKE SOLITUDE.......... 113
    AT SOUTH BRANCH.......... 137
    AT STANTON.......... 124
    AT THREE BRIDGES.......... 134
    NEAR HIGH BRIDGE.......... 109
    TRIBUTARY NO.6 AT BUDD LAKE.......... 453
    TRIBUTARY NO.7 AT BUDD LAKE.......... 453
RARITAN RIVER BASIN, DISCHARGE MEASUREMENTS AT
  MISCELLANEOUS SITES..........466,467
RARITAN RIVER BASIN, CREST-STAGE PARTIAL-RECORD
    STATIONS IN.......... 459
  DIVERSIONS.......... 277
  LOW-FLOW PARTIAL-RECORD STATIONS IN.......... 453
  RESERVOIRS IN.......... 276
    ELEVATION.......... 276
REAVILLE, NESHANIC RIVER AT.......... 136
RED BANK, SHADOW LAKE OUTLET AT.......... 287
  SWIMMING RIVER NEAR.......... 283
REMARK CODES FOR WATER-QUALITY DATA.......... 487
RESERVOIRS. SEE LAKES AND RESERVOIRS
RIDGEFIELD, WOLF CREEK AT.......... 457
RIDGEWAY BRANCH AT RT.70 NEAR LAKEHURST.......... 310
RIDGEWOOD, SADDLE RIVER AT.......... 458
RINGWOOD CREEK NEAR WANAQUE.......... 74
RIVER MILE, DEFINITION.......... 7
RIVERVALE, HACKENSACK RIVER AT.......... 45
ROBINSONS BRANCH RAHWAY RIVER AT RAHWAY.......... 103
ROCHELLE PARK, SPROUT BROOK AT.......... 459
ROCK BROOK AT BLAWENBURG.......... 460

PAGE

ROCKAWAY CREEK AT ISLAND RD. AT WHITEHOUSE.......... 189
  AT MILL RD. AT WHITEHOUSE.......... 176
  AT WHITEHOUSE.......... 178
  NEAR POTTERSTOWN.......... 162
  SOUTH BRANCH, TRIB. AT LEBANON.......... 167
    AT WHITEHOUSE.......... 169
ROCKAWAY RIVER ABOVE RESERVOIR, AT BOONTON.......... 59
  AT PINE BROOK.......... 62
  BELOW RESERVOIR, AT BOONTON.......... 61
ROCKEFELLOWS MILLS, BUSHKILL AT.......... 133
ROCKY HILL, BEDEN BROOK NEAR..........230,461
  PIKE RUN NEAR.......... 232
ROSEDALE, HONEY BRANCH NEAR.......... 460
ROUND VALLEY, PRESCOTT BROOK AT..........131,162
ROUND VALLEY RESERVOIR DATA.......... 276
ROUND VALLEY RESERVOIR NEAR LEBANON.......... 129
ROYCE BROOK AT SOUTH MAIN STREET AT MANVILLE.......... 241
RUNOFF IN INCHES, DEFINITION.......... 7

S

SADDLE RIVER AT LODI.......... 92
  AT PARAMUS.......... 458
  AT RIDGEWOOD.......... 458
  AT UPPER SADDLE RIVER..........453,458
SEA ISLE CITY, LUDLAM THOROFARE AT.......... 450
SECOND RIVER AT BELLEVILLE.......... 459
SEDIMENT.......... 14
SEDIMENT, DEFINITION.......... 7
SELECTED REFERENCES.......... 17
SHADOW LAKE OUTLET AT RED BANK.......... 287
SHARK RIVER NEAR NEPTUNE CITY.......... 289
SICKLERVILLE, GREAT EGG HARBOR RIVER NEAR..........412,456
  GREAT EGG HARBOR RIVER TRIBUTARY AT.......... 415
  GREAT EGG HARBOR RIVER TRIB. AT POND AT.......... 414
SIM PLACE, PAPOOSE BRANCH NEAR.......... 396
SINGAC, PASSAIC RIVER AT ROUTE 46 AT.......... 86
SIX MILE RUN NEAR MIDDLEBUSH..........234,461
SLEEPER BRANCH AT BATSTO.......... 454
  NEAR ATSION.......... 454
  DIVERSION CHANNEL NEAR ATSION.......... 353
SOLUTE, DEFINITION.......... 7
SOUTH BOUND BROOK, RARITAN RIVER NEAR.......... 247
  BOUND BROOK AT.......... 462
SOUTH BRANCH, HOLLAND BROOK AT.......... 138
  NORTH BRANCH RARITAN RIVER AT.......... 211
SOUTH BRANCH RARITAN RIVER AT.......... 137
SOUTH RIVER AT OLD BRIDGE.......... 270
  BELOW DUHERNAL LAKE AT OLD BRIDGE.......... 273
SOUTH TOMS RIVER, JAKES BRANCH AT.......... 324
SPARTA, WALLKILL RIVER AT OUTFLOW OF MOHAWK LAKE... 36
SPECIAL NETWORKS AND PROGRAMS.......... 9
SPECIFIC CONDUCTANCE, DEFINITION.......... 7
SPLITROCK RESERVOIR DATA.......... 96,97
SPOTSWOOD, MANALAPAN BROOK AT.......... 269
  MATCHAPONIX BROOK AT MUNCY AVE. AT.......... 266
  MANALAPAN BROOK AT BRIDGE STREET AT.......... 269
SPRINGERS BROOK NEAR ATSION.......... 455
  NEAR HAMPTON FURNACE.......... 373
  NEAR INDIAN MILLS..........371,455
SPRINGFIELD, RAHWAY RIVER NEAR.......... 101
SPROUT BROOK AT ROCHELLE PARK.......... 459
SPRUCE RUN AT CLINTON.......... 121
  NEAR HIGH BRIDGE..........117,453
SPRUCE RUN RESERVOIR DATA.......... 276
SQUANKUM, MANASQUAN RIVER AT.......... 297
  MARSH BOG BROOK AT.......... 295
SQUANKUM BRANCH AT MALAGA ROAD NEAR WILLIAMSTOWN... 430
STAFFORD FORGE, GOVERNORS BRANCH NEAR.......... 343
  WESTECUNK CREEK AT.......... 344
STAGE-DISCHARGE RELATION, DEFINITION.......... 7
STANTON, SOUTH BRANCH RARITAN RIVER AT.......... 124
STONE HARBOR, GREAT CHANNEL AT.......... 465
STONY BROOK AT ALEXANDER ROAD AT PRINCETON.......... 225
  AT GLENMOORE.......... 460
  AT NORTH PLAINFIELD.......... 461
  AT PENNINGTON.......... 460
  AT PRINCETON.......... 224
  AT PROVINCE LINE ROAD NEAR PRINCETON.......... 223
  AT WATCHUNG.......... 245
STREAMFLOW, DEFINITION.......... 7
SUCCASUNNA, LAMINGTON(BLACK) RIVER AT.......... 151
SUFFERN,NY, MAHWAH RIVER NEAR.......... 79
SUSSEX, PAPAKATING CREEK NEAR.......... 39
  WALLKILL RIVER NEAR.......... 38
SUSPENDED SEDIMENT, DEFINITION.......... 7
SUSPENDED-SEDIMENT CONCENTRATION, DEFINITION.......... 7
SUSPENDED-SEDIMENT DISCHARGE, DEFINITION.......... 7
SWEETWATER, LUCAS BRANCH AT.......... 380
  LUCAS BRANCH NEAR.......... 379
  NORTON BRANCH NEAR.......... 367
SWIMMING RIVER NEAR RED BANK.......... 283

T

TAPPAN LAKE.......... 51
TAR KILN BRANCH NEAR PORT REPUBLIC.......... 386
TENAKILL BROOK AT CLOSTER.......... 457
  AT CRESSKILL.......... 457
  AT NORWOOD, TRIBUTARY.......... 452
TENNENTS BROOK NEAR OLD BRIDGE.......... 275
TERMS, DEFINITION.......... 2
THERMOGRAPH, DEFINITION.......... 8
THIRD RIVER AT PASSAIC.......... 95
THREE BRIDGES, SOUTH BRANCH RARITAN RIVER AT.......... 134
TIDAL CREST-STAGE STATIONS.......... 464
TIDE DEFINITIONS.......... 4
TINTON FALLS, PINE BROOK AT.......... 285
TOMS RIVER NEAR LAKEHURST.......... 308
  NEAR TOMS RIVER.......... 311
  NEAR VAN HISEVILLE.......... 307

PAGE

TONS PER DAY, DEFINITION.......... 8
TOTAL, DEFINITION.......... 8
TOTAL COLIFORM BACTERIA, DEFINITION.......... 2
TOTAL SEDIMENT DISCHARGE, DEFINITION.......... 7
TOWNSEND CHANNEL AT TOWNSENDS INLET.......... 451
TOWNSENDS INLET, TOWNSEND CHANNEL AT.......... 451
TUCKAHOE RIVER AT HEAD OF RIVER.......... 446
  NEAR ESTELL MANOR.......... 445
TUCKERTON COVE NEAR TUCKERTON.......... 464
TULPEHOCKEN CREEK NEAR JENKINS..........391,455
TWO BRIDGES, PASSAIC RIVER AT.......... 68
  POMPTON RIVER AT.......... 84

U

UNION BRANCH NEAR LAKEHURST.......... 309
UNION COUNTY, GROUND WATER.......... 473
UNIONVILLE,NY, WALLKILL RIVER NEAR.......... 40
UPPER COLD BROOK NEAR POTTERSVILLE.......... 157
UPPER SADDLE RIVER, SADDLE RIVER AT..........453,458
URSINO LAKE, ELIZABETH RIVER AT.......... 100

V

VAN HISEVILLE, TOMS RIVER NEAR.......... 307
VAN SYCKEL, MULHOCKAWAY CREEK AT..........119,453
  MULHOCKAWAY CREEK TRIBUTARY AT.......... 453
VERNON, BLACK CREEK NEAR.......... 43

W

WADING RIVER AT WADING RIVER.......... 402
  WEST BRANCH, AT CHATSWORTH..........388,455
    AT MAXWELL.......... 392
    AT RT.563 AT DUKES BRIDGE.......... 389
    NEAR CHATSWORTH.......... 455
    NEAR JENKINS.......... 390
WALLKILL RIVER AT FRANKLIN.......... 37
  AT OUTFLOW OF MOHAWK LAKE AT SPARTA.......... 36
  NEAR SUSSEX.......... 38
  NEAR UNIONVILLE, NY.......... 40
WALNUT BROOK NEAR FLEMINGTON.......... 459
WAMPUM BROOK AT EATONTOWN.......... 288
WANAQUE, RINGWOOD CREEK NEAR.......... 74
  WANAQUE RIVER AT.......... 76
  WEST BROOK NEAR.......... 75
WANAQUE RESERVOIR DATA.......... 97,98
WANAQUE RIVER AT AWOSTING.......... 72
  AT MONKS.......... 73
  AT WANAQUE.......... 76
WATCHUNG, STONY BROOK AT.......... 245
WATER TEMPERATURE.......... 13
WEASEL BROOK AT CLIFTON.......... 459
WEBBS MILL BRANCH NEAR WHITING..........325,454
  TRIBUTARY NEAR WHITING.......... 454
WEEKSTOWN, LANDING CREEK NEAR.......... 385
  PINE CREEK AT.......... 382
WESCOATVILLE, HAMMONTON CREEK AT.......... 365
WEST BROOK NEAR WANAQUE.......... 75
WEST CREEK, WESTECUNK CREEK AT.......... 345
WEST MILFORD, BELCHER CREEK AT.......... 452
  BELCHER CREEK AT STOWAWAY ROAD AT.......... 452
  BELCHER CREEK TRIBUTARY AT.......... 452
  COOLEY BROOK NEAR.......... 452
  GREEN BROOK NEAR.......... 452
  MORSETOWN BROOK AT.......... 452
WEST NYACK,NY, HACKENSACK RIVER AT.......... 44
WEST OUTLET NEW BROOKLYN LAKE AT WINSLOW CROSSING.. 418
WEST WILDWOOD, GRASSY SOUND AT.......... 465
WESTECUNK CREEK, WEST CREEK AT.......... 345
WESTECUNK CREEK AT STAFFORD FORGE.......... 344
  AT WEST CREEK.......... 345
WESTON, MILLSTONE RIVER AT.......... 239
WESTONS MILLS, LAWRENCE BROOK AT.......... 263
WESTWOOD, MUSQUAPSINK BROOK AT.......... 457
  MUSQUAPSINK BROOK NEAR.......... 457
  PASCACK BROOK AT.......... 48
WET MASS, DEFINITION.......... 3
WEYMOUTH, DEEP RUN AT.......... 456
  DEEP RUN NEAR.......... 441
  GREAT EGG HARBOR RIVER AT.......... 440
WHIPPANY RIVER AT MORRISTOWN.......... 64
  NEAR PINE BROOK.......... 66
WHITEHOUSE, LAMINGTON RIVER AT..........159,459
  ROCKAWAY CREEK AT.......... 178
  ROCKAWAY CREEK AT ISLAND RD. AT.......... 189
  ROCKAWAY CREEK AT MILL RD. AT.......... 176
  SOUTH BRANCH ROCKAWAY CREEK AT.......... 169
WHITING, WEBBS MILL BRANCH NEAR..........325,454
  TRIBUTARY TO WEBBS MILL BRANCH NEAR.......... 454
WILDCAT BRANCH AT CHESILHURST..........352,454,462
WILLIAMSTOWN, SQUANKUM BRANCH AT MALAGA ROAD NEAR.. 430
WILLOW BROOK NEAR HOLMDEL.......... 279
WINSLOW CROSSING, FOURMILE BRANCH AT..........422,456
  GREAT EGG HARBOR RIVER TRIBUTARY NO. 2 AT.......... 420
  INFILTRATION POND AT STP AT.......... 423
  WEST OUTLET NEW BROOKLYN LAKE AT.......... 418
WOLF CREEK AT RIDGEFIELD.......... 457
WOODCLIFF LAKE.......... 51
WOODSVILLE BROOK AT WOODSVILLE.......... 460
WRC, DEFINITION.......... 8
WSP, DEFINITION.......... 8
WYCKOFF MILLS, NORTH BRANCH METEDECONK RIVER NEAR.. 301

Y

YELLOW BROOK AT COLTS NECK.......... 281
YELLOW DAM BRANCH AT RT. 72 NEAR BROOKVILLE.......... 395

Z

ZOOPLANKTON, DEFINITION.......... 6

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